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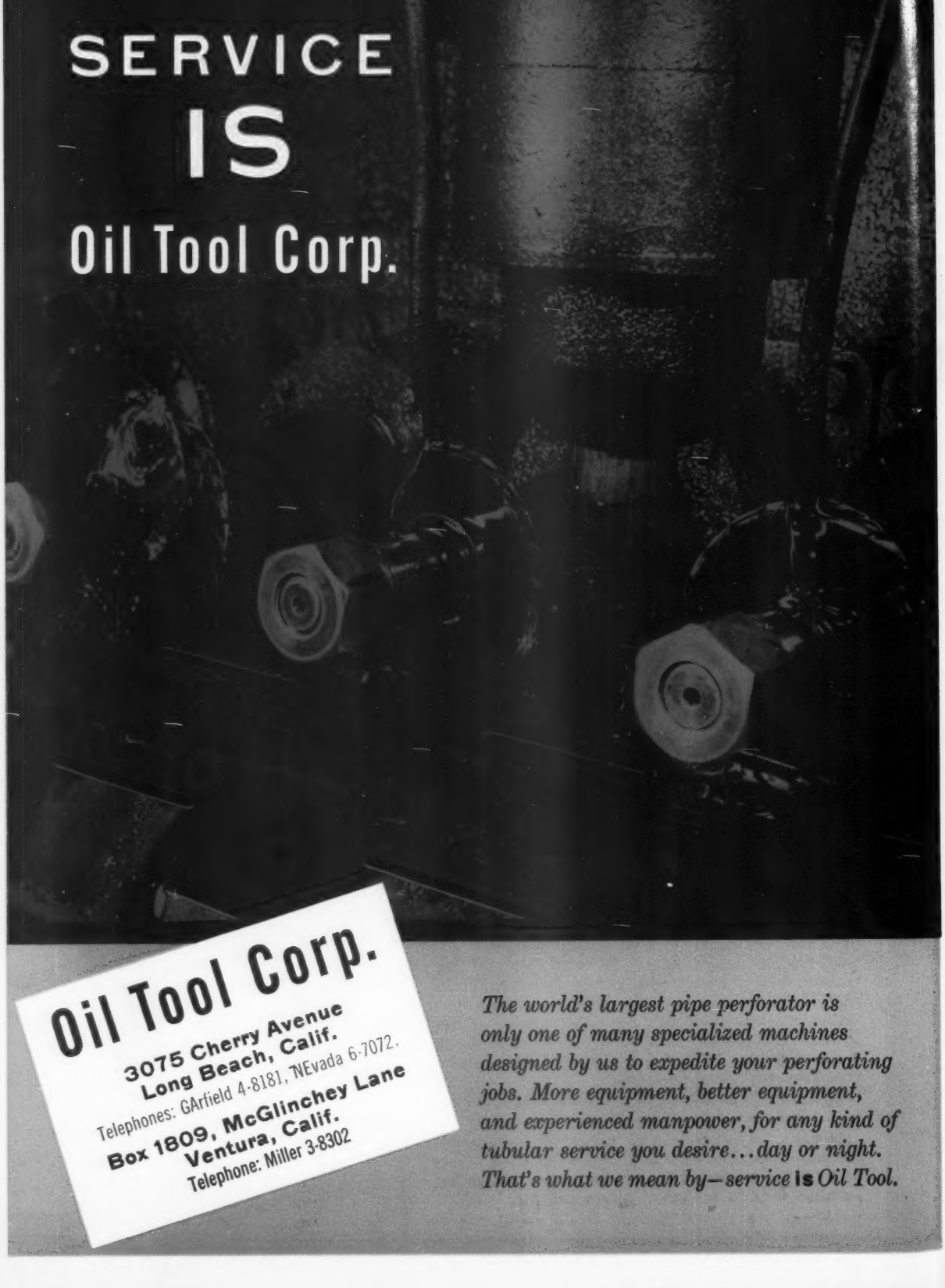

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OIL WORLD

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August 15th, 1957

Los Angeles City Streets May Be Source Of Oil Royalties

The theory has been advanced by Los Angeles Councilman Karl Rundberg that the city may in time receive untold millions of dollars for oil under city streets in active oil drilling districts.

Fowler Jones, legislative analyst, at the request of the Council is preparing a report on just how the city could go about claiming these royalties.

Councilman Harold Harby, commenting on the possibility of a new source of income for the city, said it was his understanding that Los Angeles owned the fee title to streets in only the oldest districts of the city. Harby pointed out that most streets are built on easements and the fee title still owned by the adjoining property owner.

In exploring the subject, the suggestion was made that deals might be negotiated with drilling operators when the council gives its okay to a district, by which the city would be the recipient of considerable revenues. It was also proposed that municipal land purchases for street widening, new streets and other purposes in the future be so drawn that the city receives the oil rights.

Sea of Oil

Many of the brightest minds in the petroleum fraternity see many reasons to believe that all Los Angeles and suburban sections as well, surmounts a virtual sea of oil.

With so many drilling campaigns mapped out for city territory, the Councilman's idea is of much interest.

During the pioneer days of Los Angeles oil development the center of action was largely in the old Los Angeles and Salt Lake fields. Moreover, production was from only shallow drilled depths.

Under the wave of new drilling proposed for urban areas, both old fields and new districts are earmarked for development.

Wells these days can be punched down deep and there is possibly nothing to prevent commercial development in the city and Los Angeles streets sharing in community royalties, provided legal requirements have been complied with all-around.

Rigid Restrictions

Mayor Norris Poulson, incidentally, has called upon Huber E. Smutz, City Zoning Administrator, to lay down strict rules on all future districts in the city in order that oil may be taken from the ground with the least harm and the greatest benefit to property owners.

What amazes oil leaders more than anything else, when urban development is mentioned, is the throught held by skeptics that modern petroleum practice offers any affront to any district anywhere in a city.

Civic-minded and public spirited and public relations conscious, oil companies are not inclined to move toward any conflict with the best interests of a community.

It may be repititious, but urban oil development improves and beautifies the district, rather than destroys what nature and man have contrived.

Future drilling in Los Angeles may put the city on parity with Oklahoma City, where oil at any point is eagerly awaiting a steel path to the surface.

A recapitulation disclosed a growing list of operators who are working toward participation in the Los Angeles oil development program.

Mapped out are districts in several sections in Hollywood, and at Silver Lake, Rancho Golf Club, Hillcrest Country Club, Los Angeles Country Club, West Adams, Wilshire, and others.

Controlled drilling sites will be adequately fenced and landscaped, with the rigs noise-proof, fire-proof and odor-proof. Electric power will be used and oil and gas removed by underground pipes.

Worth seeing in the years ahead will be the oil industry's great effort in Los Angeles to bring to the surface more and more oil to satisfy the climbing consumption needs of a soaring population.

California as a whole is now a state of 14,160,000 people and it is growing at the rate of 1560 a day, with Southern California getting the major share. There may be 15,860,000 Californians by mid-1960, based on these figures, compiled by the State Finance Department.

There will be no let up for petroleum products and the oil industry is not going to overlook any bets.

Bob Minckler, General Petroleum Corporation president, who always has something interesting to say, will be a main speaker at the Sixth Annual Convention of the Desk and Derrick Club, August 30-31 in Chicago.

Petroleum LORE and LINGO

In The Beginning

Eons and peons ago, some large, careless star wandered too close to the sun and exercised such a terriffic gravity drag on Old Sol that some sizable hunks flew off into space and have been whirling about the ether ever since. One of these pieces was the earth on which we mortals now live—in a comical sort of way—and as nearly as the experts can determine, the birthday of our planet took place several billions of years ago. There are a number of methods of making such estimates. One, for example, is this: It is now known that certain earth rocks have a well established radio activity. It is also well known that this radio activity is dissipated at a specific rate. Thus if the radio activity of the rocks be measured now, it is possible by simple arithmetic to get some approximate idea of their age and hence the age of the formations in which they are found. Making due allowance for plenty of error, tests on the oldest available rocks would indicate that they are about two billion years of age. No wonder they look so wrinkled! By the way, if you don't want to risk the embarrassment of short-changing your English and Dutch friends, remember that although a thousand million is a billion in the United States, it takes a million million to make a billion in England and Germany.

The Process of Change

Since the movement of its origin, the earth has been subject to constant change. Great internal strivings like earthquakes and volcanic eruptions have poked mountain peaks up towards the sky. Water and winds have levelled them again. Rivers and streams have etched out channels and valleys, and have flowed on to form oceans and seas in which they have dumped endless deposits of mud, ground up rocks, and other stuff that we ordinary folk generally term "dirt." It seems, indeed, as if the entire solid world everywhere is in the process of being reduced to powder by attrition

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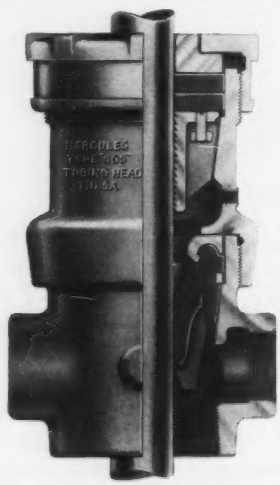

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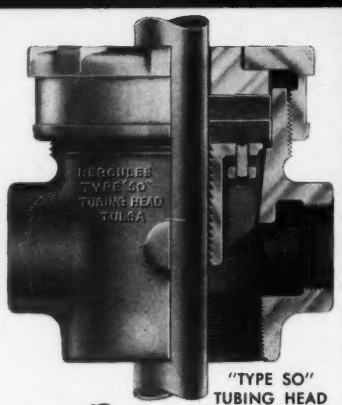

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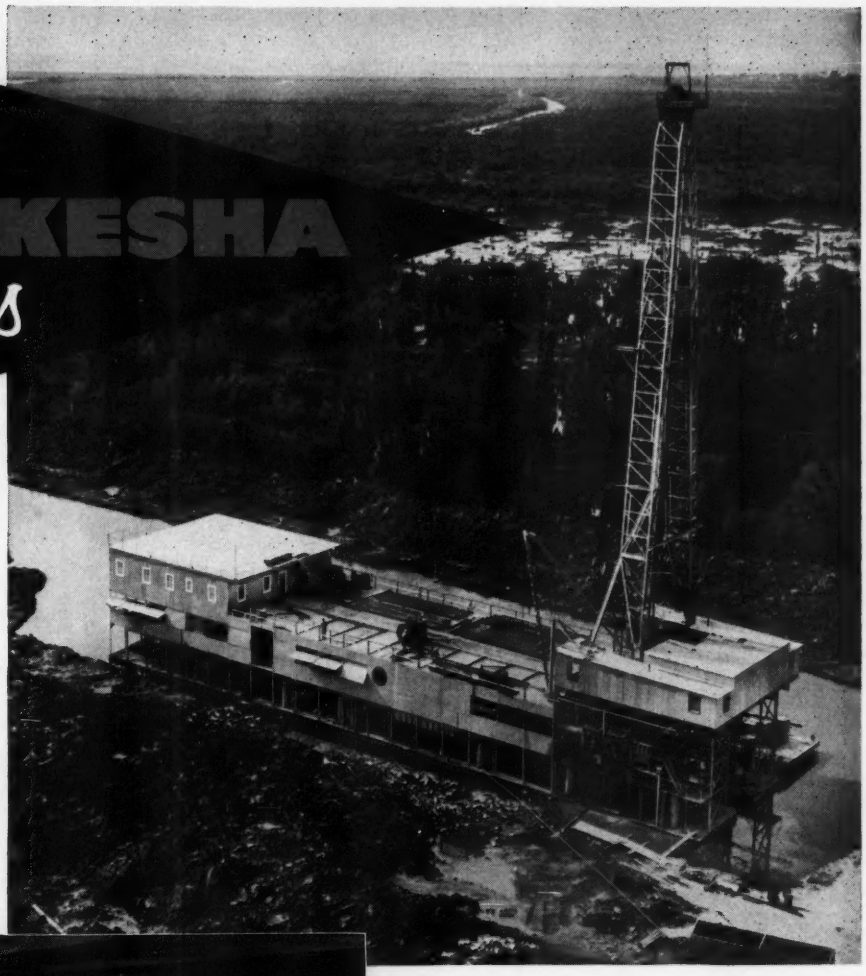

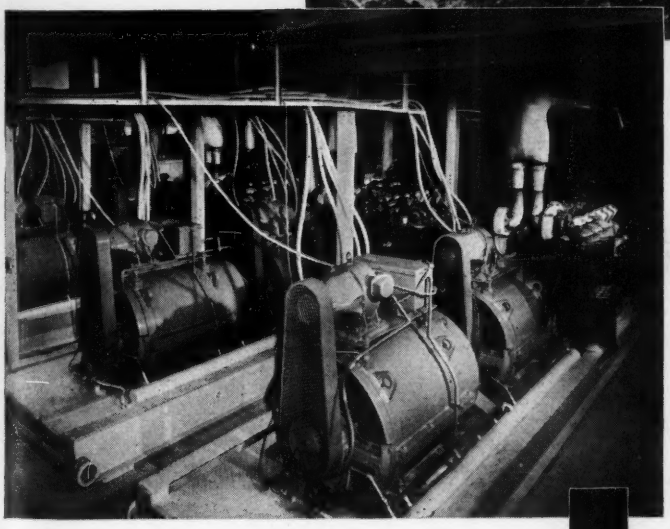

• Circle Drilling Company's 143-ft. Rig No. 6—mounted on their 52 x 220 ft. barge *Kirk C. Lewis* which operates in water to 18 ft. in depth—is one of the world's largest Diesel-electric outfits. Shown here at Week's Island, La., it is drilling a 17,000 ft. well for a major oil company.

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(Latin atterere, "to rub") of some sort or another.

The Story in the Rocks

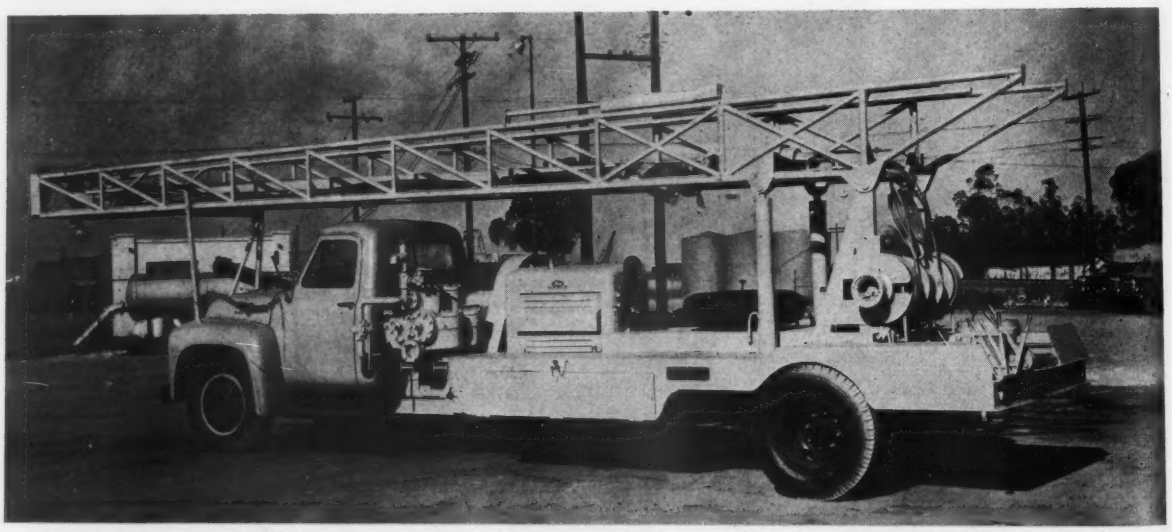
We shall go into that a little more fully anon but for the moment it is sufficient to know that earth changes are still taking place every minute of every day, and that not only has much of the order and character of the earth's substance already altered amazingly, but its living things — plants and animals— have also been, and still are, the victims of ceaseless evolutionary change. All of this constitutes a very interesting history, and it is written indelibly in the rocks, as we shall see. It is the interpretation of this tale of two billion years more or less of earth behavior, what happened and when, that drives the geoscientists into agonies of search and deduction. It is not easy to read the rocks, however, and that is why the current evolutionary trend in geologists is towards a more penetrating stare and a more deeply puckered brow.

The Value of Time

A story is told of a farmer who, when exhorted to transport his hogs to market by plane, and so save time, stated unconcernedly, "Shucks! Time don't mean nothin' to a hog." Well time don't mean nothin' to a geologist either. If his guess as to the date of some significant event in earth history is a few million years off one way or other, he is quite happy. The thing that really matters, however, is the age relationship between sub-surface formations in an unexploited area and those in another area that have been found to be the repository of valuable minerals, or that have been found to contain no minerals. Both types of information are valuable.

The Geological Time Table

As a means of facilitating the study of such relationships, an arbitrary geological time table has been compiled. Leaving out the Azoic era, when there was no life on earth (Greek a, "no" and zoe, "life), time is divided into five major historical increments, known as "eras," on the basis of certain major evolutionary changes. It is hardly worthwhile here to give an account of the dominant life in the various geological time divisions. We shall subsequently be discussing the significance of fossils in the search for petroleum, and at that time will refer to those plant and animal fossils that are of most interest to the oil exploration people. In his book, "The Story of Science," David Dietz tells us that according to the Bible, "the earth brought forth abundantly the moving creatures that hath life." Because of this, fossils were long believed to be the remains of animals that were formed in the earth at the time of the creation, and never quite made it to the surface. The oldest two eras, the Proterozoic and Archeozoic, are commonly bunched together and termed the Pre-Cambrian because rocks of this age were first studied in Wales and the Roman name for Wales is Cambria. No one knows much about life in Pre-Cambrian days and anyway the oil geologist is not



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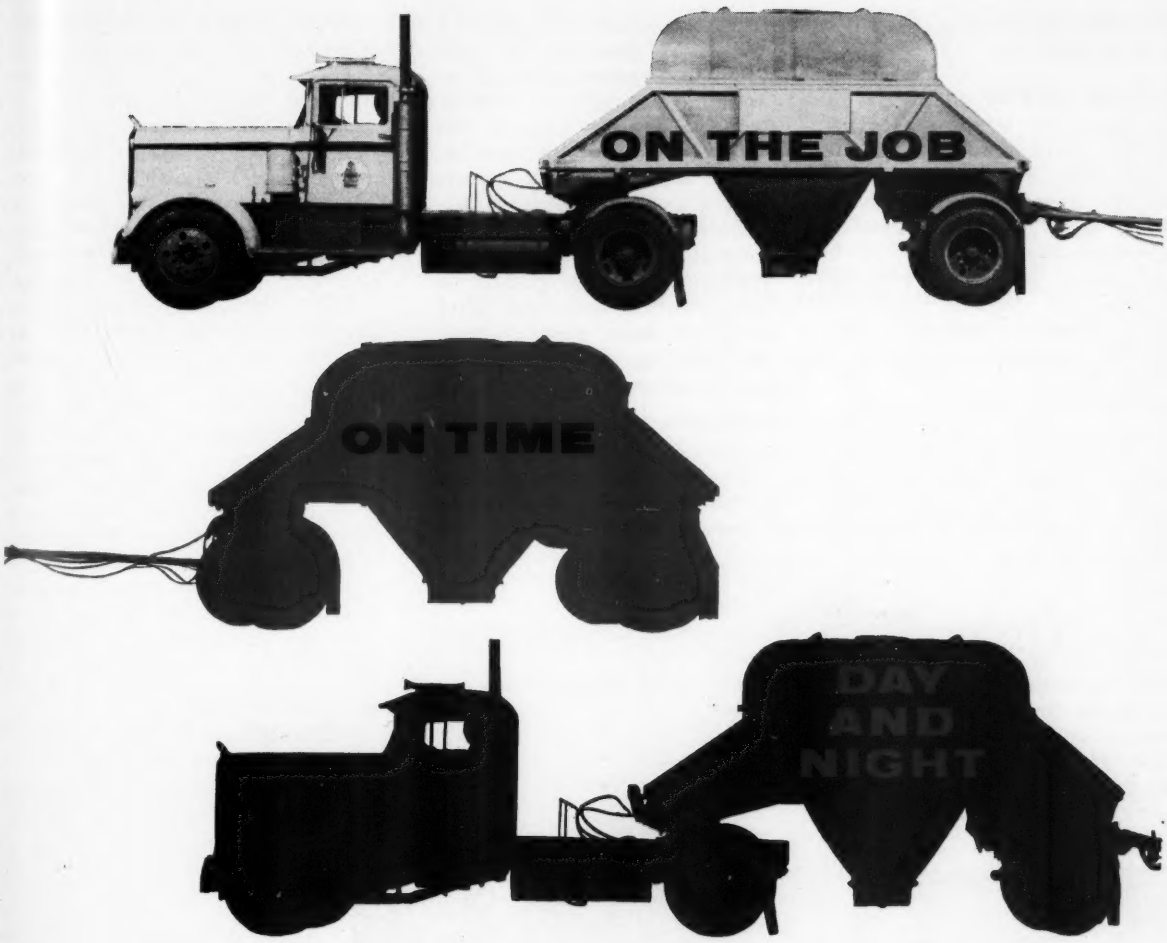

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More About the Eras

The remainder of the geological calendar is divided into the Paleozoic, Mesozoic, and Cenozoic eras. These are, respectively, "ancient" "middle" and "recent" sweeps of evolutionary time, from the Greek palaios, mesos, and kainos, having these meanings, coupled with zoe, "life." It is well to remember that the geological conception of time is not much like our own and that the world "recent" as used to designate a late era is strictly comparative. It simply means that the Cenozoic era is younger or more recent than the Mesozoic but it still covers many millions of years and is anything but recent as the layman understands the term.

Now Come the Subdivisions

Each era is subdivided into lesser fractions of time, known as periods, and the whole business could become rather bewildering if it weren't for the fact that it is seldom necessary to remember more than the particular few in which you may be immediately interested. In California, for example, all the oil so far found has been in rocks of Cenozoic age. In general, the names of the geologic time intervals follow a common pattern. They are mostly compounds of Greek stems and appropriate affixes, designed to indicate relative age. A number of them, however, are named after the places where rocks of their particular age outcrop, or were first recognized.

Name Derivations

Cenozoic periods and their name origins are as follows, the termination, "cene" in every instance meaning "recent."

Recent

Pleistocene; from Greek Pleistos—"most."

Pliocene; from Greek pleion—"more."

Miocene; from Greek meion—"less."

Oligocene, from Greek oligos—"little."

Eocene, from Greek eos—"dawn."

The Eocene marks the dawn of the Cenozoic era but the combination of "dawn" and "recent" is not exactly a happy one. There are several names in this group, indeed, that could certainly have been improved upon. In his Dictionary of Modern English Usage, H. W. Fowler, the noted English lexicographer, takes exception in no uncertain terms. The word "miocene," for instance, he calls, "A typical example of the monstrosities with which scientific men, in want of a label for something, and indifferent to all beyond their own province, defile the language. The elements of the word are Greek but not the way they are put together or the meaning demanded of the compound." Oh, well(despite the fierce indignation of the eminent Cantabrigian (that is Latin for one who lives in or has been graduated from Cambridge) we laymen know what the geo-chaps are trying to say.

Mid-Geologic Ages

The Mesozoic period names and origins are somewhat different in character from those we have just examined. Here

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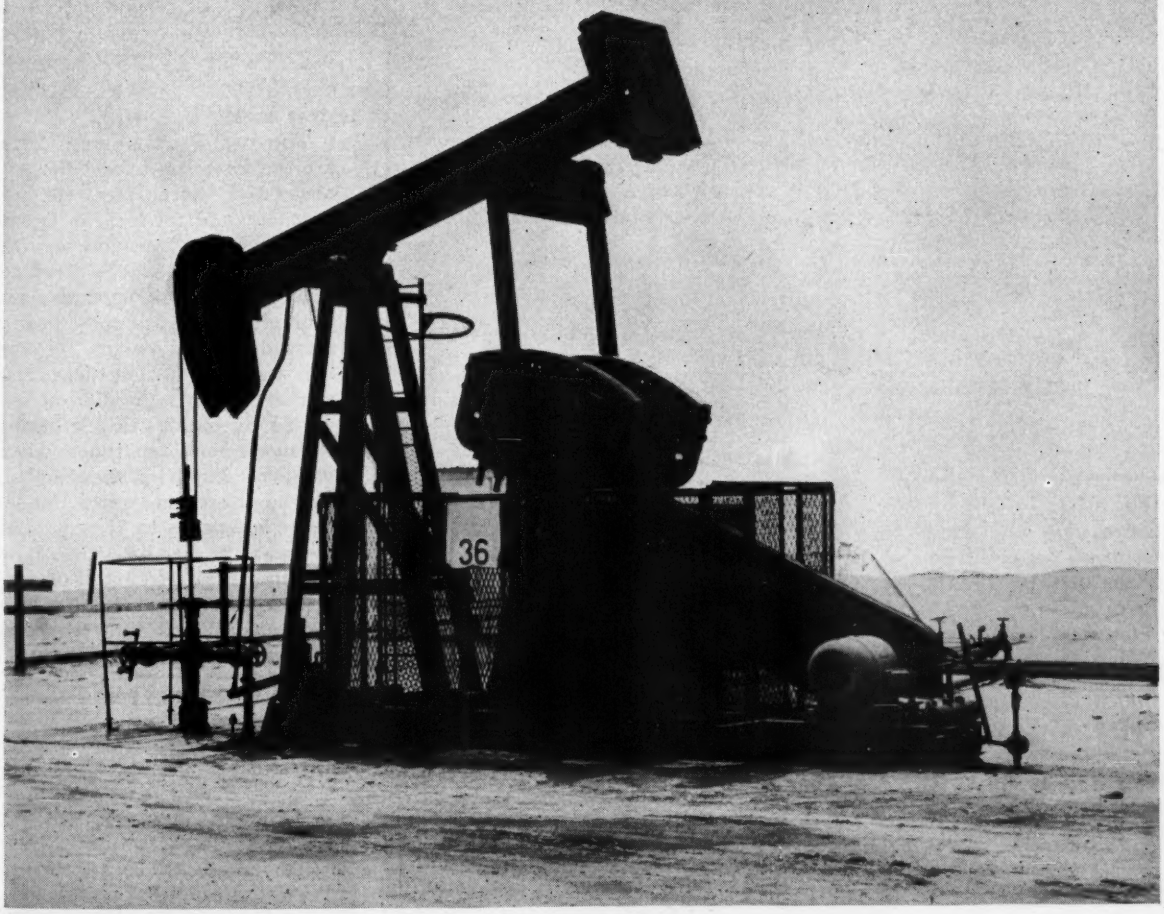

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they are:

Cretaceous, from creta, "chalk."

Commanchean, from Commanche County, Texas.

Jurrassic, from Jura Mountains, between France and Switzerland.

Triassic, from Latin, trias, "three."

The deposits of the Cretaceous period are characterized by chalk beds, hence the name. Commanchean and Jurassic are, of course, simply place names. The Triassic gets its designation from the fact that in Germany the rocks of this period are segregated in three distinctive sub-divisions, the Bunter, Muschelkalk, and Keuper.

More Ancient Ones

The Paleozoic periods all derive their names from places and peoples, as follows:

Permian, from a former province of Perm in East Russia where rocks of this age have been found.

Pennsylvanian, so-called for a similiar reason. Sometimes also named carboniferous proper and upper carboniferous, because it contains most of the coal deposits of the United States, east of the Great Plains. Corresponding systems contain most of the coal of Europe and China.

Mississippian, or lower carboniferous, was doubtless first located in the State from which it acquired its name.

Devonian, acquired its name from the fact that the first study of rocks of this age took place in Devonshire, England.

Silurian, was named for an ancient race, known as the Silures that originated in the Iberian Peninsula and migrated to South Wales where the Silurian rocks were first noted.

Ordovician, was named for a race called the Ordovices. It looks at first as if someone had goofed here because "Ordovices" is merely the Roman word for "Silures." However, originally there were two Silurian periods—upper and lower, and the Ordovician was contrived to displace the lower Silurian.

Cambrian, is an offshot of the Roman word for Wales where the first evidence of this age was discovered.

Oldest of All

The two Pre-Cambrian Eras are the Proterozoic and the Archeozic. Proteros is Greek for "earlier" and archaois is Greek for "primitive," so, you see, the struggle to coin words meaning younger than young, and older than old, has led to some pretty startling developments. Maybe it is just as well that these relative ages were concealed in scientific sounding Greek terms because there are times when what we know of the English language seems quite inadequate to enable us to say what we want to say. Besides, it is amazing how a common or garden expression can be dignified by translating it into technical jargon.

Whence Came the Razz

A classic example of this is the "raspberry," described by Fowler as "a consonant sound produced by passage of breath between organs." According to Webster, "to razz" means "to chaff, banter, tease, or ridicule." Both Fowler and Webster fall lamentably short of registering

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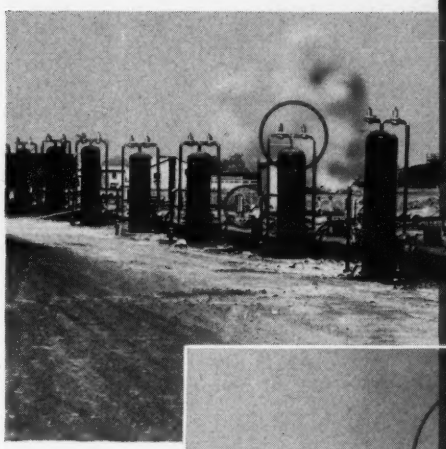

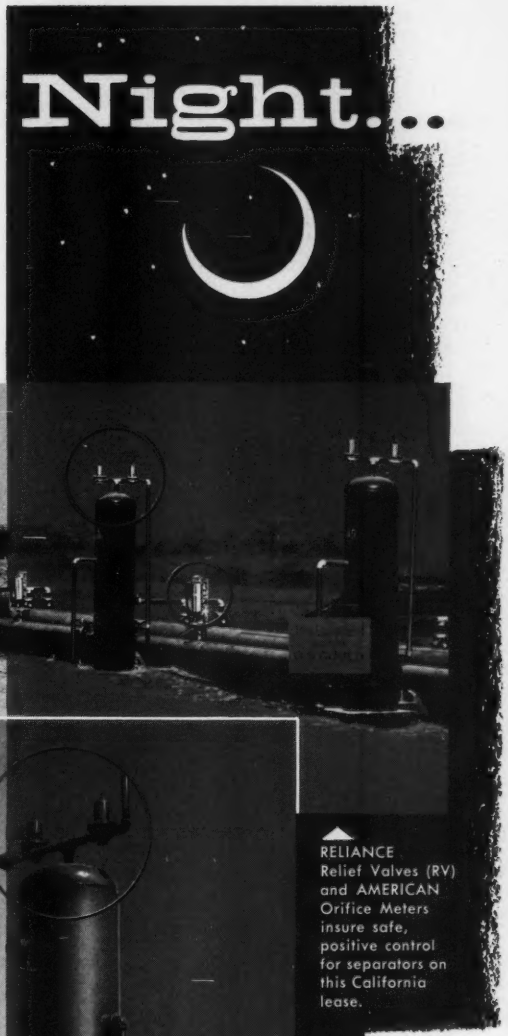

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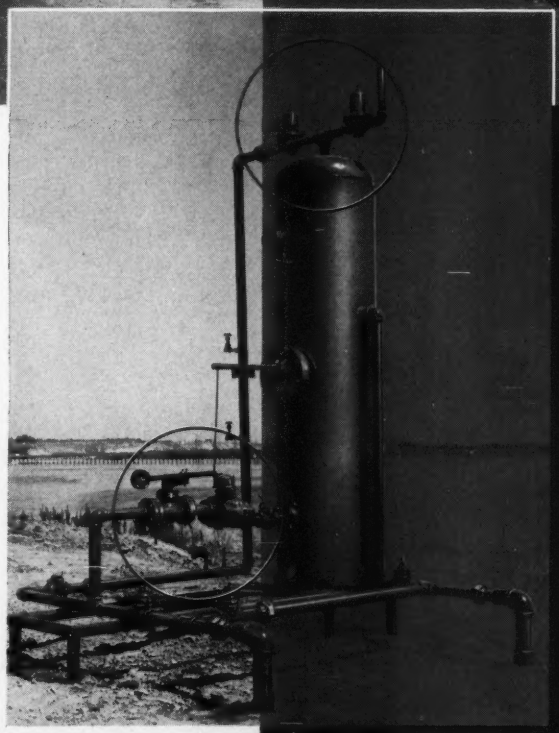

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JENSEN JACKS

the awful depth of despising that is wrapped up in the razz of the American sports fan. This one is made by expelling air through loosely compressed wet lips, and is usually aimed at one's gin-rummy partner, the umpire, at a baseball game, or a high-diving boxer. It is in every sense a vulgarity, but when converted into its technical equivalent it could quite comfortably be mentioned at an afternoon tea. Scientifically, it is termed a "bilabial fricative," from the Latin bis, "two," labium "a lip," and fricare, "to rub' . . . hence, "cause to vibrate."

Of Zones and Stuff

Returning to the geologic time calendar, all the rocks and formations that constitute the earth's crust fall into one or other of the intervals mentioned. Normally, the deeper they lie, the older they are, although in places they are found completely reversed by some terrestrial upheaval. Basically, the same name is given to the same age strata, regardless of where it may be found. However, when oil discoveries are made, the specific formations or zones that yield the oil are often named after the discoverer, some local landmark, or other feature of the region. There are hundreds of such names and it would take a stout volume even to list them with their locales. To recite the history of each one separately is certainly beyond the intent of this writing. It should perhaps be mentioned, however, that while the interest of California oil operators has up to the moment been largely confined to the Cenozoic era, in other parts of the United States and the world, petroleum deposits have been found in sediments of greater age.

Early Nomenclature

Before geology flowered into its current verbal grandiloquence, the earliest rocks were referred to by the simple adjective "primary"; those of Mesozoic age were "secondary"; and the Cenozoic era was divided into "tertiary" and "quaternary," or third and fourth in succession. The last two terms although usually unnecessary are still used but no one ever talks about secondary rocks any more.

The Geological Function

The function of the petroleum geo-scientist is to find the subsurface oil accumulations no matter how artfully they may be concealed by a jealous Mother Nature. So far, unfortunately no one has been able to devise a positive method of identifying oil in place or in situ, which is the Latin version of the same thing. (It's amazing how a hack writer can increase his stature by sprinkling bits of first year Latin throughout his discourses.) Anyway, most geologists, with typical scientific conservatism, contend that no such method ever will be devised. I being just mildly scientific but strongly optimistic, venture to disagree with these estimable gentlemen which will no doubt toss the entire oil finding profession into a horrific tizzy.

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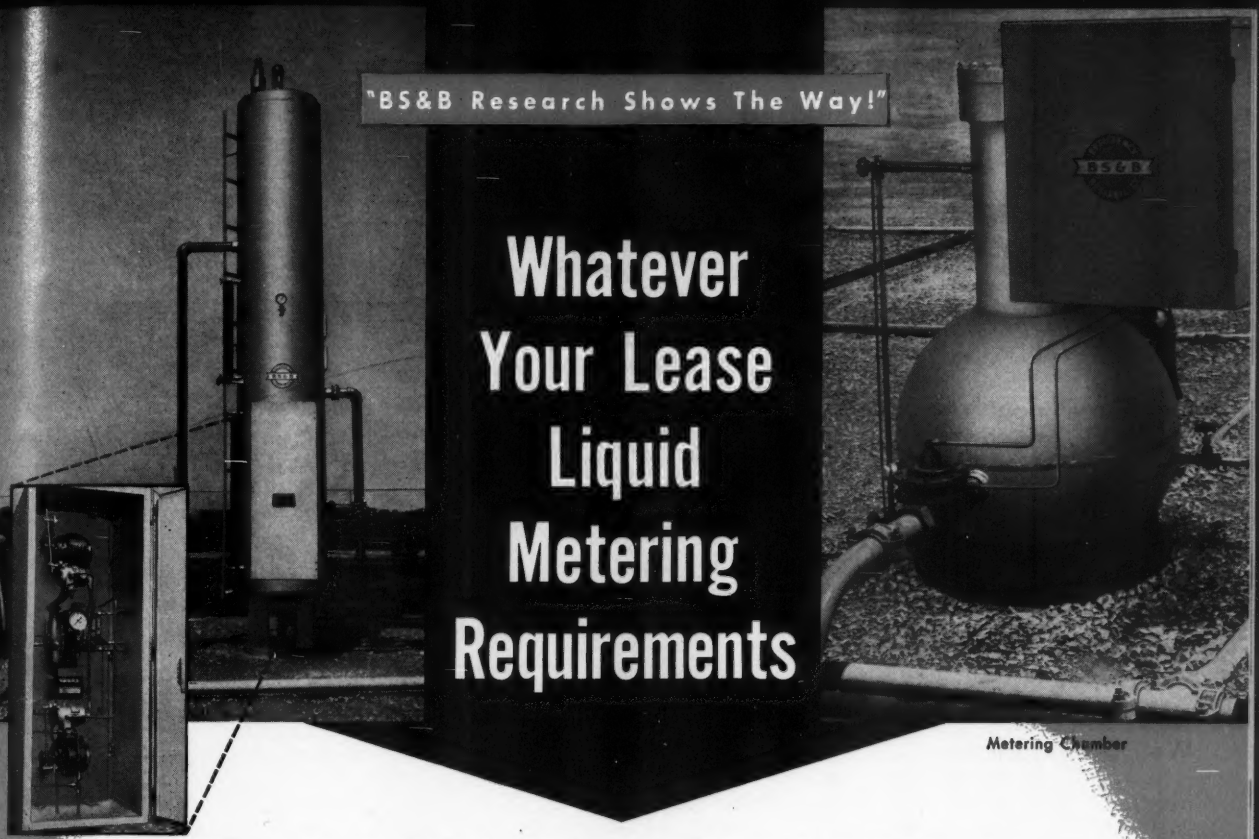

Metering Chamber

Metering Separator

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For today's rapidly developing trend to oil lease automation, BS&B offers a complete line of fully automatic liquid metering equipment to meet every lease requirement. Any of the following items of equipment may be used independently — or as an integral part of the recently announced new BS&B "PHANTO-MATIC" Lease System:

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3. **BS&B METERING TEST TREATER, TYPE VMT** — Combines a standard BS&B Emulsion Treater with Volumetric Metering Chambers to provide accurate metering of oil and water produced from wells being tested.
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Field Development

Corona Wildcat Well On Calendar

A new Riverside County wildcat well will be drilled on Section 22-3s-7w, northwest of Corona, by J. B. Nelson as operator. Bob Quinn is handling the engineering. Henry T. Giller and William P. Spaugh's WPS No. 1 wildcat on Section 24-3s-8w in the Prado Dam area is temporarily idle at 290 feet.

Newhall-Potrero Well On Production

Sunray Mid-Continent Oil Company's RSF No. 144-7 well on Section 26-4n-17w is in from 12,790 feet for a present output of 197 barrels of 26.1 gravity oil, through a 48/64-inch bean, along with 26,000 cubic feet of gas a day. The company's RSF No. 145-7 on Section 27 is being drilled at 3000 feet. They are in the Newhall-Potrero field.

Saugus Wildcat Drilling Continued

Last reported drilling depth was 4500 feet on Union Oil Company's N L & F No. 4 wildcat project on Section 15-4n-16w in the Saugus area, Los Angeles County. Rocky Mountain Drilling Company is contractor.

Sisquoc Wildcat Goes Off Board

Sunray Mid-Continent Oil Company's Sisquoc Rancho No. 3 on projected Section 12-8n-31w in the Sisquoc area of Ventura County has been abandoned at 3785 feet.

South Mountain Wildcat Drilling

Drilling is going forward below 1000 feet with Humble Oil & Refining Company's interesting wildcat well on Section 29-3n-20w, southeast of the expanding South Mountain field in Ventura County. Camay Drilling Company is in charge of the drilling chores.

West Montalvo Well Completed

Richfield Oil Corporation's Richfield-Doheny-Laubacher-Fleisher No. 3 well on Section 31-2n-22w at West Montalvo in Ventura County has been completed at a redrilled depth of 10,610 feet, after going to 14,560 feet the first time. Last reported output was 161 barrels of 14.7 gravity oil a day, cutting 1.1 per cent.

Yolo County Well Runs Into Trouble

Humble Oil & Refining Company is fishing stuck drill pipe with its Mary A. Tippets Estate No. 1 well on Section 15-12n-3w, two miles east of Rumsey townsite in Yolo County. Top of fish is placed at 12,440 feet in the project, currently down 15,000 feet. To date only one other wildcat has gone so deep. It will be remembered that General Petroleum Corporation put down a 15,300-foot duster in 1955 in southern Yolo County.

Compton Landing Well Progresses

Drilling has reached 1600 feet with Honolulu Oil Company's Honolulu-Humble-Dunham Unit No. 2 well on Section 12-17n-2w at Compton Landing in Colusa County. Contractor is Gene Reid Drilling Company.

Ojai Wildcat Location Made

Matilija Oil Company has placed location for its Scott-Government No.

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A completion mud which permits no water to enter the producing formation.

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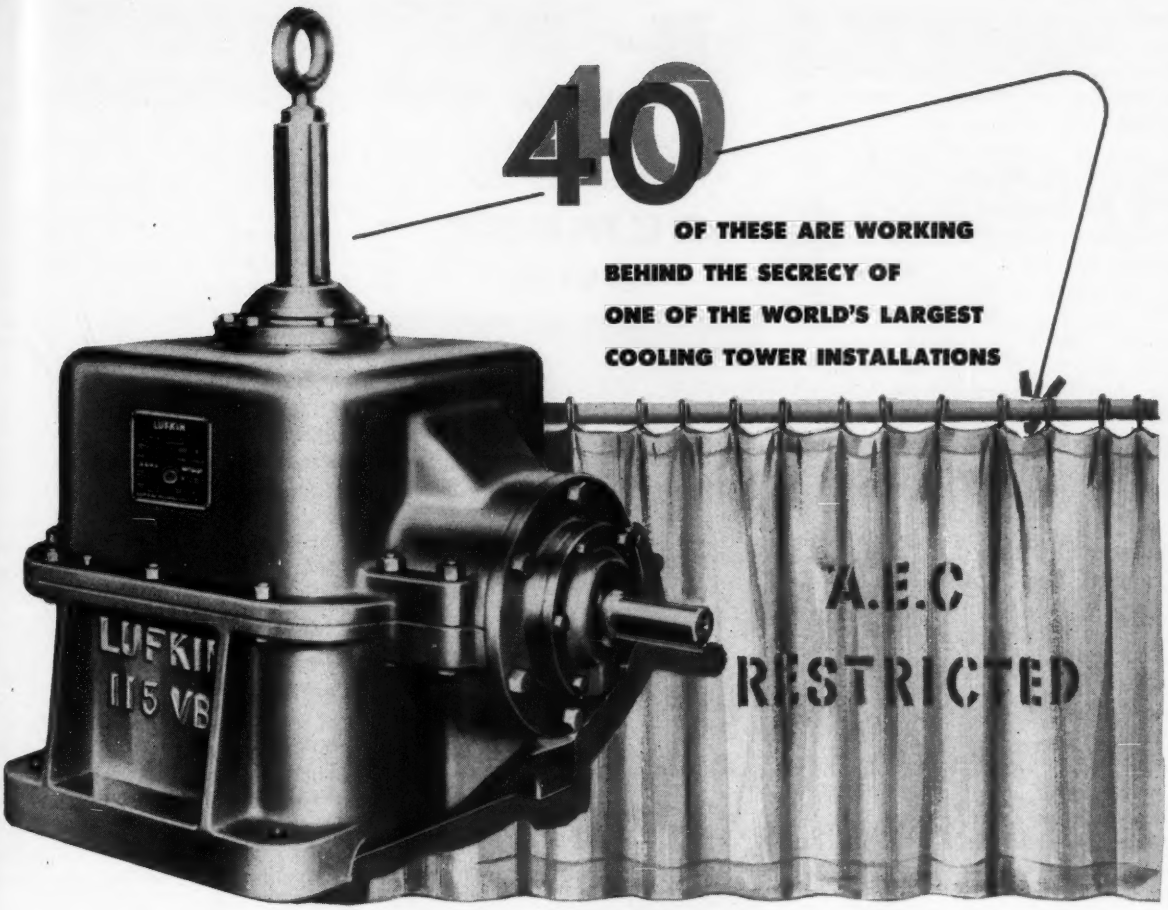

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1 wildcat well on Section 1-4n-22w in the Ojai area in Ventura County. Oil has been produced in the general area in one way or another for nearly 90 years.

Topa Topa Well Will Be Slanted

Frank R. Halterman is preparing to resume operations with Scott Russell No. 1 wildcat on Section 1-5n-21w on the Topa Topa Anticline in Ventura County. The well will be plugged back from present total depth of 5683 feet for slant drilling from around 3500 feet. The project originally flew the banner of Robert B. Payne of Dallas, who has an expansive acreage block around the drill site.

Roscoe Oil Plan Oxnard Test Well

Moving ahead in the earlier stages is Roscoe Oil Company's Ecoff No. 1 well on Section 2-1n-22w in the Oxnard area of Ventura County. Contract driller is the A. D. Rushing Drilling Company. The well is 1600 feet northwest of production. The Texas Company has placed location for its Bannon-Silver-K No. 1 Oxnard wildcat on projected Section 14-1n-22w. Target depth will be 9000 feet, or approximately.

Simi Development Well Drilling Ahead

In the old Simi field in Ventura County, which has been producing for about 60 years, M. H. Marr is continuing his development work there with Marr Ranch No. 21, now drilling on Section 30-3n-17w. Gary Core Drilling Company is the contractor.

Deer Creek Wildcat Drilling Scheduled

Western Gulf Oil Company is nearing the drilling stage with its Clement No. 1 wildcat well on Section 29-8s-2w in the Deer Creek area in Santa Cruz County. The drill site is eight and one-half miles south and a little west of the Oil Creek field, which Union Oil Company ran across duirng the closing days of 1955. In the Forest Park sector of the county, Columbia Oil Company will drill Meyer Community No. 1 wildcat on Section 17-9s-2w. Custom Drilling Company's Nord No. 1 test on Section 9-9s-2w near Santa Cruz townsite has been abandoned at 2620 feet.

B and W Inc.

FOR A

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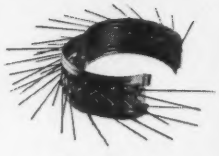

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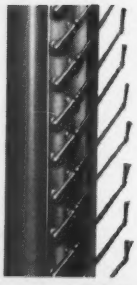

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Arbuckle Wildcat Clicks With Gas

Flowing at the daily rate of 1,947,000 cubic feet of gas through a 22/64-inch bean, Western Gulf Oil Company's Arbuckle Unit K No. 1 wildcat well on Section 4-13n-2w is in from 6600 feet. Brown Drilling Company as contractor put the well down in the Arbuckle area in Colusa County. The 5½-inch casing is cemented on bottom. Western Gulf has started drilling a followup job on the section, Arbuckle Unit L No. 1.

Tepusquet Wildcat Standing Idle

Sunray Mid-Continent Oil Company's Sisquoc Rancho No. 1 wildcat well at Tepusquet in Santa Barbara County is idle at 4824 feet. Location is on Section 22-9n-32w.

Sacramento Test Staked

The Texas Company is ready to drill its Arthur Brown (NCT-I) No. 4 wildcat on projected Section 2-4n-4e at Georgiana Slough in Sacramento County. Santa Fe Drilling Company is the contractor. Texaco abandoned Georgiana Unit Two No. 1 on Section 4 at 4295 feet.

Union Oil Plans La Honda Wildcats

Union Oil Company has staked J. Breeden No. 1 on Section 4-7s-4w, and F. P. Guerra No. 1 on Section 15-7s-4w, San Mateo County. The drill sites are near Harrison Creek, with the former northeast of the La Honda field by two and one half miles, and the latter, by two miles in the same direction from production. Neaves Petroleum Developments' Neaves-Stanton No. 1, which explored to a total depth of 2657 feet on Section 16-7s-4w, has been abandoned at 2657 feet.

Capitan Wildcat Test Under Way

Exeter Oil Company has made technical spud with its No. 1 wildcat at Capitan in Santa Barbara County and is moving in heavier equipment to drill on down from 60 feet. The well, on Section 2-4n-30w, is known as All States-Slick Moorman-Edwards No. 1.

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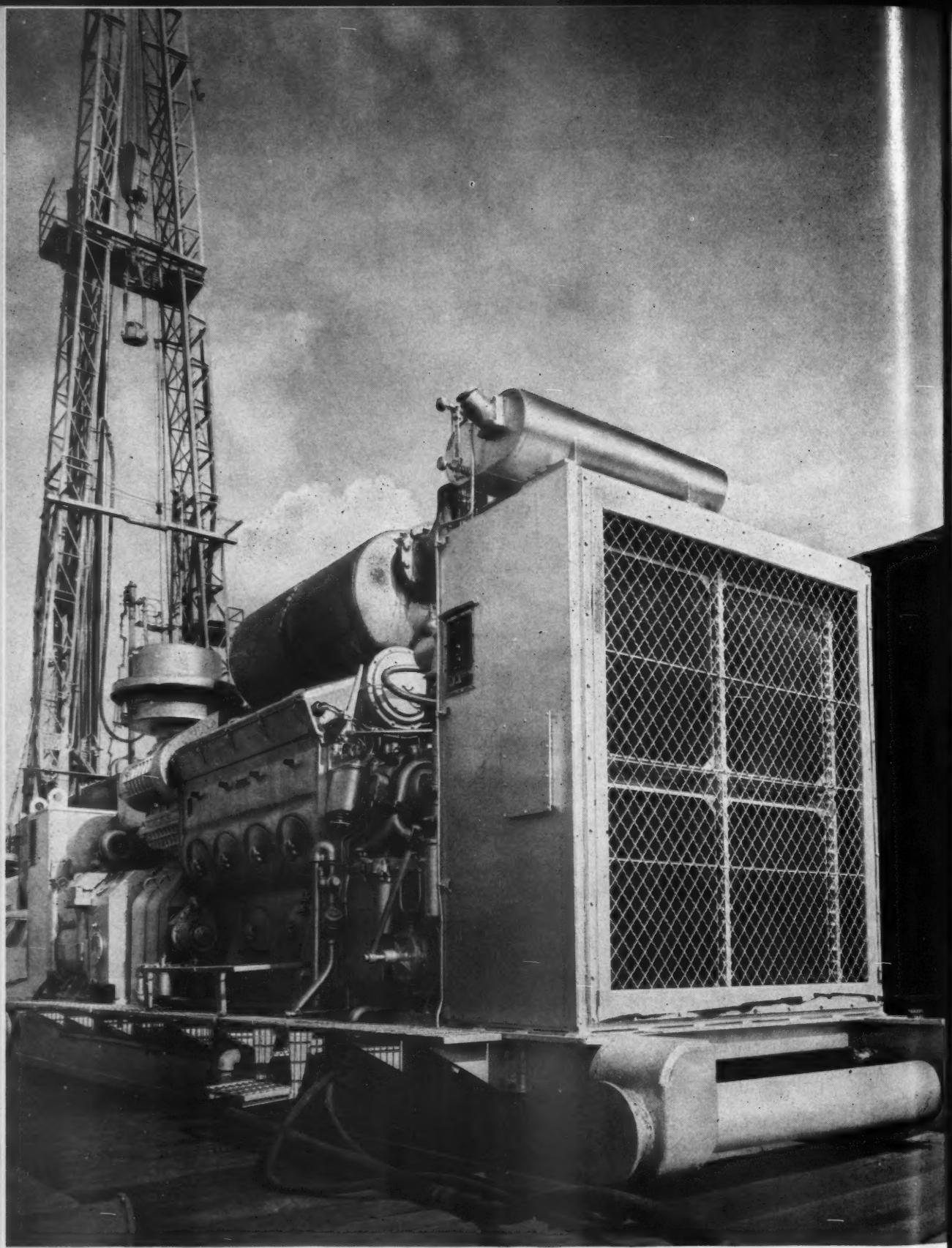


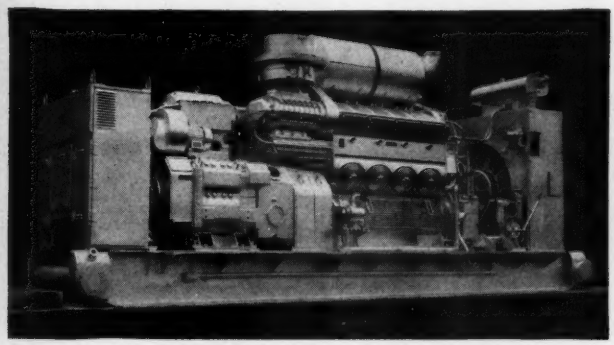
In operation on Sun Oil Company's Rig 15 at Rayne, La. is Electro-Motive's new drilling power unit, the SR-10. Main features include increased engine hp, increased generator and drive motor capacity, lighter weight, integral AC generator, simplified maintenance and load regulator control.

Announcing
a significant advancement in
deep well drilling power

New Electro-Motive SR-10 Power Unit

In 1955, Electro-Motive introduced the first fully integrated Diesel-electric power system for oilwell drilling. Success of these units is demonstrated by the fact that Electro-Motive Power is widely used by drilling companies throughout the Gulf Coast area.

Now, Electro-Motive offers another first and significant contribution to the oil industry's increasing need to drill deeper, faster and more economically — the first standardized, completely self-sufficient Diesel-electric power system. These are its features:



The SR-10 is a refinement of Electro-Motive's original plan to build a *complete* and integrated Diesel-electric system designed and built to work as a unit with one manufacturing responsibility.

For detailed specifications on the new SR-10 unit, contact your Electro-Motive representative in any of the cities listed below.

INDEPENDENT AC SUPPLY

A new integral AC generator (100-KW) makes the SR-10 completely independent of outside supply for its own AC needs—blowers, exciters, control equipment.

INCREASED POWER

Engine horsepower has been increased to 1000. New D49-G generators produce up to 640-KW each (2 per engine). New D49-M drive motors deliver up to 800 horsepower.

GREATER POWER UTILIZATION

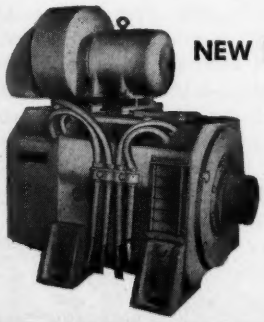
New load regulator provides load balance between units. Thus, if power requirements exceed that available on one unit, the load regulator automatically loads a second unit to satisfy drilling demands.

REDUCED MAINTENANCE

New improved motor control cabinet is simpler and more efficient. Its new design combines with many other improvements, both electrical and mechanical, to appreciably reduce overall maintenance time and expense.

LIGHTER WEIGHT

A new speed-increasing transmission between the engine and generators and other changes have cut the weight of the air cooled unit by more than 2000 pounds.



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Monticello Test Begins

Standard Oil Company of California is about to spud-in its Johnson Creek No. 1 wildcat well on Section 33-35s-22e, 15 miles southwest of Monticello and some distance north of Four Corners production. The project is designed as a 6200-foot test of the Paradox.

Paradox Limestone Test Drilling Ahead

Superior Oil Company's Navajo No. C-4 well on Section 6-41s-25e in the Paradox Limestone in San Juan County Utah, is drilling near 1600 feet. Continental Oil Company recently finaled its Navajo No. A-2 on Section 27-41s-24e for a flow of 2,230 barrels of 41 gravity oil a day through a one-inch orifice. Opened was the Aneth pay sand of the Paradox formation at 5360-5523 feet. Gas-oil ratio was 515 to one. It extended the East Desert Creek to the southwest.

Orland Buttes Drilling Ready

Humble Oil & Refining Company will be going soon with its Ernest M. Michael No. 1 wildcat on Section 33-22n-4w in the Orland Buttes area of Glenn County. Contract has been let to Coastal Drilling Company. At South Orland, Brazos Oil & Gas Company will drill Brazos-Union-Betanco No. 1 wildcat on Section 7-21s-2w.

King City Test Drilling Ahead

Marport Oil Company's Marport-Mozzini No. 2 wildcat on Section 11-20s-7e near King City in Monterey County is moving ahead below 3000 feet, with Enterprise Drilling Company doing the contract work.

Navajo Tract Pool Developing

Carter Oil Company, which recently struck rich oil with its Navajo Tract No. 114 well in the Four Corners area, is under way with its Navajo Tract No. 116 well on Section 30-41s-25e. The company's daily net crude oil production during the first half of 1957 averaged 71,400 barrels, compared with 65,150 barrels in the corresponding period of last year and the highest in the company's history.

East Desert Creek Project Under Way

Davis Oil Company of Denver is drilling at a relatively shallow level with its No. 1 Navajo 399 on Section 2-43s-25e in the Desert Creek pool area. Location is about five miles east of Superior Oil Company's Navajo No. 1-G. Nine miles east of producing wells at East Desert Creek, Shell Oil Company will drill a Mississippian test on Section 19-41s-26e.

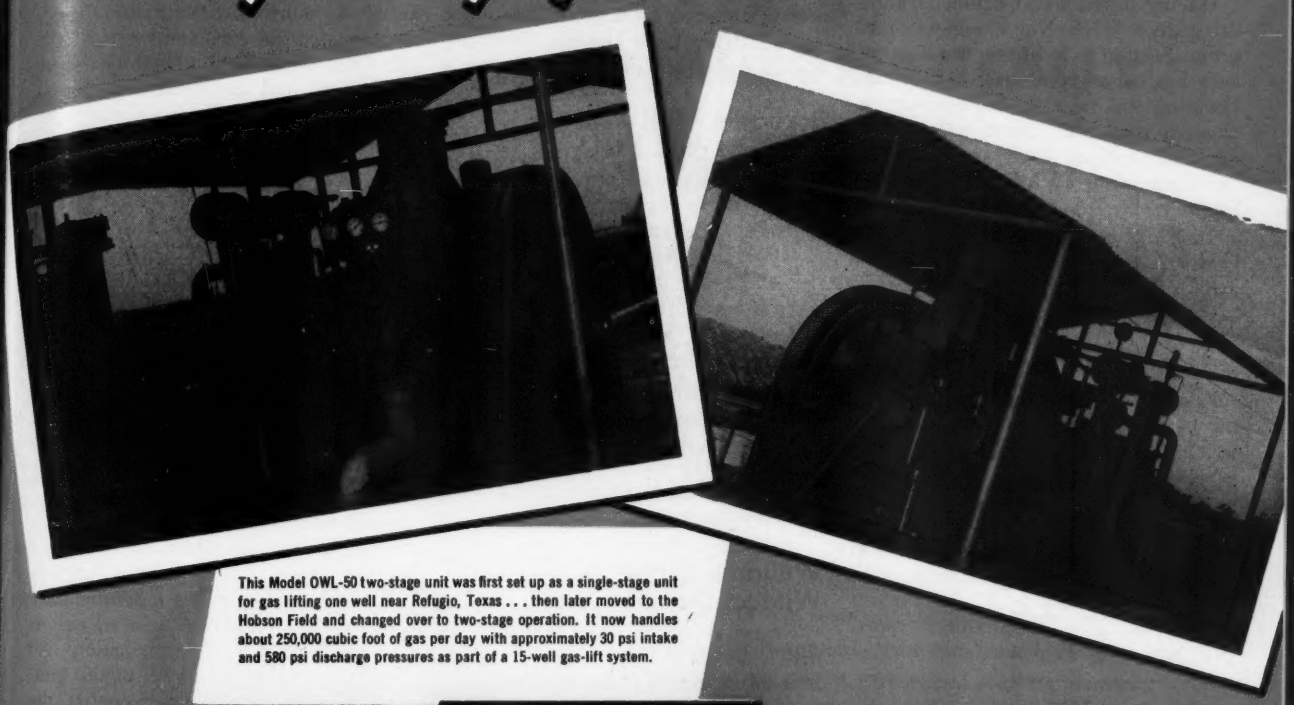
Malibu Wildcat Drilling Ahead

Approximately one and one-half miles north of the ocean strand and a comparable distance east of the Ventura County boundary line, Western Gulf Oil Company's Salisbury No. 1 wildcat well is being drilled below 2500 feet. The drill site on Section 19-1s-19w in Los Angeles County, is no great distance from two shallow and unproductive wells, taken down to 405 feet and 3251 feet, respectively, at Moorpark. U.S. Drilling Company is the contract driller of the WG test.

Charlie Canyon Venture Gets Going

Intex Oil Company of Bakersfield is drilling a second wildcat well in the Charlie Canyon area in Los Angeles County, where it recently abandoned its first test there. Yule No. 2 is on Section 31-5-16w and about 700 feet east of the No. 1, which recovered gassy mud and oil spots on formation test of the interval of 1017-1074 feet. Operations are more than a half mile northeast of the Castaic Hills Field. Century Service Company is the contract driller on Yule No. 2.

Any way you look at it—



This Model OWL-50 two-stage unit was first set up as a single-stage unit for gas lifting one well near Refugio, Texas . . . then later moved to the Hobson Field and changed over to two-stage operation. It now handles about 250,000 cubic foot of gas per day with approximately 30 psi intake and 580 psi discharge pressures as part of a 15-well gas-lift system.

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SLOW SPEED—Both engine and compressor are of the slow-speed type, designed to give continuous full-load service with minimum field maintenance. Piston-type compressor incorporates standard crosshead construction. Mechanically-operated forced-feed lubricator has individual feeds which assure adequate lubrication at all operating speeds.

APPLICATION RANGE — Compressor cylinders can be furnished in single, two or three-stage types, capable of developing pressures up to 3,000 psi and are designed with top suction and bottom discharge connections. 20, 30, and 50 hp sizes are available.

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Bandini Wildcat Tested and Abandoned

Having tested wet, Custom Drilling Company's MNS No. 1 wildcat project on Section 7-2s-12w in the Bandini area has been given up at 4785 feet. Location was near the intersection of Downey road and Noakes street. Nordon Corporation, Ltd., and Richfield Oil Corporation each have wells drilling in the Bandini field.

Guijarral Hills Adds Big Producer

Sunray Mid-Continent Oil Company's Allison No. E-61-34 well, which recently added importance to the Guijarral Hills field by starting off for about 1600 barrels daily, currently puts out 1729 barrels of 29.9 gravity oil, cutting four per cent, through a 42/64-inch orifice. Gas out put is 3,248,000 cubic feet a day. The well, bottomed at 10,348 feet, lies 1500 feet northeast of the discovery well, completed last May by L. A. Harnish as operator. The new producer topped the Gatchell at 9943 feet.

Los Lobos Wildcat Ready For Drilling

All set to drill is Shell Oil Company's KCL No. 16X-26 wildcat test on Section 26-11n-22w and one and one-quarter miles southeast of the Los Lobos field in southern San Joaquin Valley. The venture is officially bent on going to no less than 10,000 feet for a thorough "looksee."

Kings County Wildcat Listed

At the starting line is the W. F. Daggett, Jr., Dudley Ridge Community Lease No. 1 wildcat in the Dudley Ridge gas area in Kings County. The drill site is 1120 feet north and 500 feet east from the south quarter corner of Section 15-23s-20e. Engineering is being handled by Easton & Sacre. Barnes Core Drilling Company has been assigned drilling contract.

Rosedale Well Quits At 6971 Ft.

Electric log was run and sidewall samples taken for a final check before Shell Oil Company abandoned at 6971 feet its KCL No. 64-14 well on Section 41-29s-26e in the Rosedale area in Kern County. The duster was a southeast offset to the discovery.

Dagney Gap Test Abandoned

Bandini Petroleum Company's University of California Hole A on Section 3-25s-18e at Dagney Gap, Kern County, has been abandoned at 1500 feet, plus or minus.

Williams Sector Wildcat Staked

Franco Western Oil Company will drill Western Petroleum-USL No. 25A-27 wildcat on Section 27-32s-23e, southwest of the Williams sector in the Midway-Sunset field. Maximum target depth probably will be 3500 feet.

Rio Bravo Test Drilling Slated

West Texas Oil Corporation's Dickinson No. 1 wildcat well on Section 22-28s-25e in the Rio Bravo area of Kern County is still a location only. Work probably will start in the near future.

Drilling Well At Dyer Creek

Drilling is proceeding above objective depth of some 3400 feet with Pacific Oil & Gas Development Corporation, Operator, Ella-K No. 14-14 wildcat on Section 14-26s-27e. The well is primarily aimed for the Famosa sand. It is located one mile southwest of the old Dyer Creek field, abandoned some years ago, and four miles northwest of Mount Poso. United Cuban Oil, Inc., shares interest in the play, embracing more than 1100 acres. The chores are in the hands of Davis & Thompson.

Carrizo Plains Project Started

Under way in largely desert area between San Joaquin Valley and Cuyama Valley is the John M. Young, Operator, Young-Wreden No. 51 exploratory well on Section 10-29s-18e, with Barnes Core Drilling Company the contractor. The drill site is on the famed Wreden Ranch and five miles northwest of the town of Simmler. Carrizo Plains, prior to the Cuyama Valley discovery and at a greater pace after the find, was the scene of extensive wildcatting. Approximately 80 tests have been put down in the general area. Oil showings were of the "teasing" variety.

Vallecitos Well Drilling Steadily

Shell Oil Company's Breckenridge No. 31-35 wildcat on Section 35-16s-10e, slightly less than two miles northwest of the F & I pool at Vallecitos in Benito County, is drilling near 2000 feet. Five wells in the pool are producing in excess of 1200 barrels a day. Hagestad Drilling Company is contract driller. On Section 25-16s-11e, Cal-Tex Tungsten Company's No. 5 wildcat is several hundred feet down and drilling ahead. Sweet Bros. is do-

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Most versatile cup in the oil fields today, the Guiberson GW Packer Cup is a cup of a thousand uses. It provides an automatic sealing element adaptable to a multitude of tools — well testing and cementing tools, sand pump pistons, perforation cleaners, production packers, line packers, junk pushers, casing testers, blowout preventer testers and countless others. The GW cup *seals automatically* the moment pressure is applied — the greater the pressure, the tighter the seal. A directional packing element, the GW packs off and holds pressure on the side the lip is pointed. Lip readily passes fluid in opposite direction, acting as a casing check valve. The GW Packer Cup is molded of special oil and gas resistant compound. Its strong, flexible lip of oversize diameter gives instantaneous and positive sealing at any depth in the casing. Cup is reinforced with spring steel wires interlocked in a metal bushing and completely molded-in to seal and hold high pressures. The GW cup is available in more than 50 sizes to fit any casing or tubing in use today. Moderate in cost, for all its versatility, the GW is the hardest working hand on the rig!

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ing the work. Robert S. Lytle's Ashurst No. 42X-12 wildcat on Section 12-17s-11e has been suspended at 5985 feet. At Hollister, the Harry H. Magee, Operator, Breen No. 2 on Section 20-12s-5e, has been written off at 5383 feet. On test of the interval of 4516-4520 feet, the well showed a recovery of 2800 feet of salt water. The 5½-inch casing was set and cemented at 5335 feet. The Petrolex Inc., Ferry Morse No. 1 on the same section is still idle at 5015 feet.

Jacalitos Test Moving On Down

Two miles east of the Jacalitos field and a like distance southeast of Coalinga townsite, Signal Oil & Gas Company is drilling not far from target depth of 6500 feet with Signal-Welch No. 88-10 wildcat on Section 10-21s-15e, Fresno County. The Upper and Lower Temblor is the source of production in the Jacalitos field, which at present is not much more than 1000 barrels a day from about 100 wells. A look at Gatos Creek disclosed that George Wake's Jewel No. 1 wildcat on Section 21-19s-13 is idle at 2976 feet.

Wheeler Ridge Wildcat Staked

Richfield Oil Corporation will drill Richfield-Sunray Springman No. 84-26 on Section 26-11n-20w on unproductive ground between the northeast sector of the Wheeler Ridge field and the Windgap sector. The company currently has four additional wells at various operational stages in the general Wheeler Ridge area.

Tulare Explorer Awaiting Big Rig

Ajax Oil & Development Company is awaiting larger rig to take on down its Ajax-Phyllis No. 81-11 near Allensworth in Tulare County, which at present is touching 5803 feet. The well, on Section 11-24s-23e, is being drilled by Miller & York under contract.

Welcome Valley Wildcat Inactive

Barnes Core Drilling Company's Eddyell No. 3 on Section 7-26s-19e in Welcome Valley, Kern County, is idle at 1320 feet, following electric log survey to 1171 feet. The Point of Rocks was topped at 1067 feet.

San Emidio Stevens Test Ready To Drill

Richfield Oil Corporation is all set to drill its KCL H No. 33-15, a scheduled 14,000-foot test on Section 15-11n-21w at San Emidio Nose. Location is about seven miles east of the Los Lobos field and four miles northwest of Coal Oil Canyon wells at Wheeler Ridge in southern San Joaquin Valley. Some 12 years ago, Richfield tried drilling luck with a wildcat on Section 8-11s-21e to 12,675 feet. The project ended up as a duster in Upper Miocene formation.

Wasco Wildcat Drilling Ahead

Standard Oil Company of California, which opened the Wasco Eocene pool in 1949 by recompleting Mushrush No. 5 deeper near 15,500 feet, is currently digging below 1000 feet with KCL No. 40 on Section 17-27s-24e in the area. The field was discovered by Continental Oil Company in 1938 with a 15,000-foot producer from the Vedder sands.

Shafter Well Test Negative

Following a test of the interval of 4285 feet and bottom at 4330 feet, in which 60 feet of drilling mud was recovered, Geochemical Surveys has abandoned its Neumann No. 26X-17 well on Section 17-28s-25e in the Shafter area in Kern County.

Montana

The Texas Co. and Mobil Producing have found gas and oil shows in the Devonian at their wildcat in Sheridan County, the No. Brekke, c nw ne 5-33n-56e. Operators are drilling below 9000 feet and will go ahead to test the Winnipeg, expected at 10,800 feet.

Carter Oil Co. is preparing to drill a Winnipeg near the Canadian border at the No. 1 Nelson, c ne nw 1-37n-53e, Sheridan County. The scheduled test is northeast of the Outlook field.

In Daniels County, Pan American Petroleum, which is drilling an Ordovician test at the No. 1 Godden, c se se 5-33n-49e, found salt water in a test of the Devonian. The well will be drilled to 9600 feet for the Red River (Ordovician) test. In an earlier test of the MacGowan zone, free oil was recovered.

The Texas Co. is drilling a Winnipeg test at the No. 1 McGowan, n½ ne nw 2-32n-50e, Roosevelt County. Objective is expected at 10,200 feet.

Another test of the Winnipeg has been spotted for Custer County. It will be the No. 1 Blum, c nw nw 21-7n-48e, scheduled for 8900 feet.

At the No. 1 Norager in Sheridan County, an extension of the Outlook field, Amerada Petroleum is drilling around 7800 feet. The well is located in w½ sw sw 21-36n-53e.

In Musselshell County, the Texas Co. has abandoned the No. 1 Robertson, nw se ne 13-11n-30e, at total depth of 4250 feet.

Shell Oil and Union Oil of California have staked location for a test of the Madison at the No. 1 Lewis, c ne 10-31n-12w, Glacier County. It is 65 miles south of Madison production in the Pincher Creek field of Canada.

Western Canada

Southland Royalty and Greta Petroleums Ltd. have installed pump at their Ellis sand discovery in southern Alberta, which flowed at the rate of five barrels of oil per hour. The pay section was topped at 3000 feet and the well was drilled to 3051 feet total depth.

New Metals Merges With Wesco Refining

New Metals Corporation, a California oil and mining concern, has merged with Wesco Refining Company. The surviving company is New Metals and the refinery at Rangely, Colorado, will operate as a division of it. The Wesco refinery currently is purchasing all of New Metals' production in addition to 500 barrels of oil a day from The Texas Company. The refinery puts through 1200 barrels of crude oil daily.

Important? Yes...but definitely no secret

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Talk to anyone active in pipelining about GASO Pumps and he'll tell you they're such a familiar sight in the field that pipeliners think of them as standard equipment. It's a reputation based on performance that would be hard to believe were it not confirmed by accurate cost records. We're as close to you as our nearest distributor.

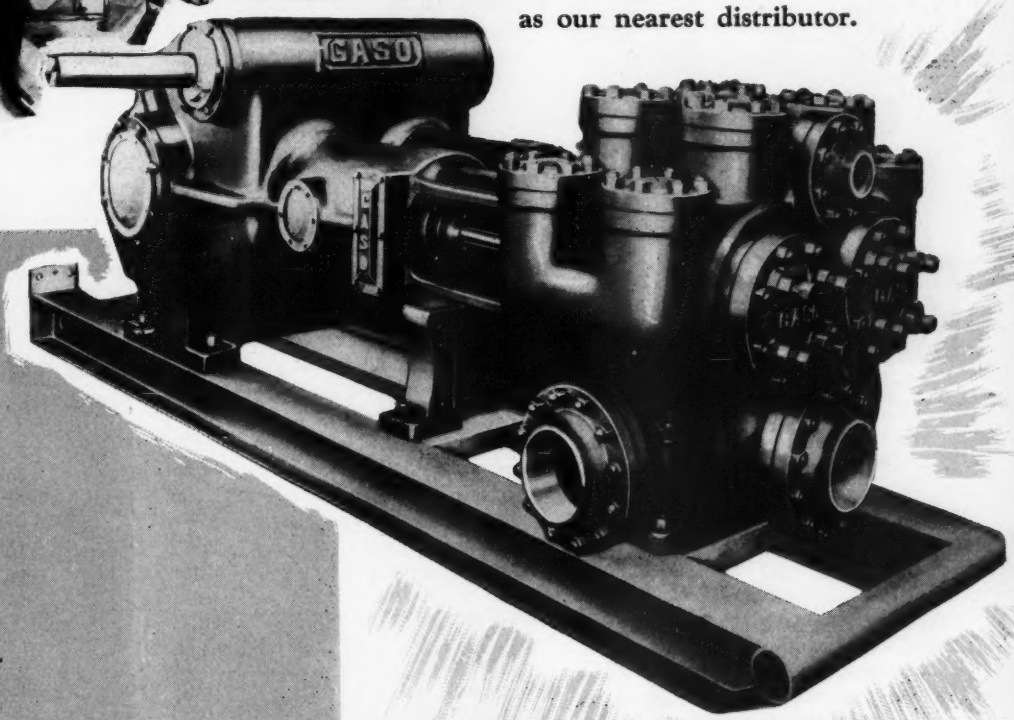

Fig. 2651-2652 — Gaso 12" stroke Duplex Piston Power Pump. Largest of Gaso models designed to pump oil or water through long lines at pressures from 475 to 1500 psi.

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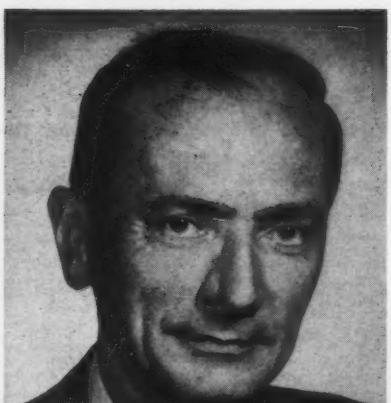
for every oil industry need

Personalities IN THE NEWS

Van Beveren Advances At Standard Oil

O. F. Van Beveren has been elected Vice President and Director of Standard Oil Company of California, Western Operations, Inc. and named General Manager of the Company's Exploration Department.



O. F. Van Beveren

The announcement was made by E. J. McClanahan, President of Western Operations, Inc., which is the Western operating subsidiary of Standard Oil Company of California.

Van Beveren has previously been serving as special consultant-exploration on the parent Standard's Corporation staff, on leave from his post as head of the Exploration Department.

A native of Belgium, the new officer of Western Operations, Inc., is a geology graduate of California Institute of Technology and holds a master's degree in the same field from the University of Colorado.

He joined the Standard of California organization as a draftsman in 1933 and subsequently rose through a succession of geological assignments which took him to Mexico, the Middle East and the East Indies, as well as throughout the western United States.

He was appointed Manager of Exploration in 1952 and temporarily assigned as Special Consultant in 1956. In his new capacity he will have responsibility for conducting the Company's exploratory activities in the seven Western States and Alaska.

Van Beveren is a member of the American Association of Petroleum Geologists, the Society of Exploration Geophysicists, and American Seismological Society.

Garrison Heads Conservation Committee

The Conservation Committee of California Oil Producers announced that it has elected Robert H. Garrison, of Hellman Estate, as its chairman for the ensuing twelve months. Mr. Garrison has served on the Conservation Committee for approximately twenty-five years. At the present time he is chairman of District No. 17, representing operators in the Seal Beach and Belmont Off-Shore Fields.

The Conservation Committee conducts a program for oil conservation in California oil fields to increase underground recovery on a voluntary basis, which is supported by a majority of the oil operators. The district committee members are elected by vote of the oil producers in the State to represent the various fields and districts. There are 1285 oil operators with a total of 36,303 oil wells producing in California at a rate of 927,274 B/D as of April 30, 1957.

Other officers elected were: First Vice Chairman, D. G. Kingman, of General Petroleum Corporation, representing District No. 1 (Antelope Hills, Belridge North, Lost Hills, etc.); Second Vice Chairman, R. J. Stephens, of Kern Oil Company Limited, representing District No. 24 (Sansinena, Montebello, Whittier, Bandini, etc.); and Secretary, R. B. Hodgson, of Tidewater Oil Company, representing District No. 22 (Inglewood, Beverly Hills, Los Angeles, etc.)

Mr. Paul E. Terry, representative from District No. 12 (Santa Maria Valley), was elected chairman of the Administrative Committee. Mr. Terry is Vice President of Capital Company. The Administrative Committee is responsible for the financial and administrative affairs of the organization. Other members elected to this committee are Milan G. Arthur, T. W. Bell, O. A. Graybeal, and R. G. Rogers.

Mr. B. P. Bayliss, representative from District No. 16 (Santa Clara Valley District), was elected chairman of the Engineering Board. Mr. Bayliss is a petroleum engineer for Lloyd Corporation, Ltd. The Engineering Board makes studies of oil fields to determine proper conservation measures in the establishment of maximum efficient rates of production of crude oil. Other members elected to the Engineering Board were A. J. Horn, Joseph Jensen, D. I. Johnstone, W. W. Kessler, S. A. Patterson, J. O. Richardson, L. R. Rogers, M. Silbergh, and E. E. Nichols.

Maebius Joins Tidewater

Jed B. Maebius has been appointed to the newly-created position of senior

Jed B. Maebius

Chedo Chuckovich

He's one of the few who got a second chance

"I'm Chedo Chuckovich, lucky to live in America.

"For I have also been Chedo Chuckovich, man without a country.

"I was born in Belgrade, Yugoslavia. My father was co-owner of the Serbian-American National Bank. I had been educated in schools in France and Switzerland, and planned on a career in diplomacy.

"When I was 17, the Germans invaded my country. I fled with my family into the hills, and joined the guerillas. My father was killed. My brother was killed. I was wounded and taken prisoner, and starved for five years in a Nazi concentration camp.

"Two weeks before the war's end, the Canadians freed me. My family was dead or scattered. Our property had been

CHEDO, AFTER CONCENTRATION CAMPS

confiscated. The Communists had taken over Yugoslavia. I was a man without a country.

"But I was one of the lucky displaced persons. Unlike so many of the others, I got to America, and a new start.

"Today I am in business for myself, a Union Oil dealer in Pacific Palisades, California. I have money in the bank, a home, a car. I have the respect of my neighbors. I have friends and a future again. I will soon be an American citizen.

"I will work at my citizenship because I learned the hard way you can't take it for granted. You have to earn it.

"I know, because I'm one of the few who got a second chance at freedom."

CHEDO CHUCKOVICH: "YOU CAN'T TAKE YOUR FREEDOM FOR GRANTED."

Chedo's life underlines a basic truth, we believe: Wherever men would remain free, they must remain alert.

For any concentration of power in the hands of a few—whether they be business men, financiers, industrialists, government officials or labor leaders—is, inevitably, at the expense of the majority.

YOUR COMMENTS ARE INVITED. *Write: The Chairman of the Board, Union Oil Co., Union Oil Bldg., Los Angeles 17, Calif.*

Union Oil Company OF CALIFORNIA

MANUFACTURERS OF ROYAL TRITON, THE AMAZING PURPLE MOTOR OIL

geologist for domestic exploration in Tidewater Oil Company's headquarters exploration department in San Francisco, according to a company announcement.

Before joining Tidewater, Maebius spent 20 years with the Gulf Oil Corporation exploration department, holding various posts including chief geologist and then assistant exploration manager in Gulf's Tulsa division. For the past two years he has served as a consulting geologist in Tulsa.

Maebius received bachelor and master of science degrees in geology from the University of Michigan.

He is a member of the American Association of Petroleum Geologists, the Geological Society of America, the Sigma Xi honorary scientific society, the American Geological Institute and the Tulsa Geology Society.

New Appointment At Tidewater

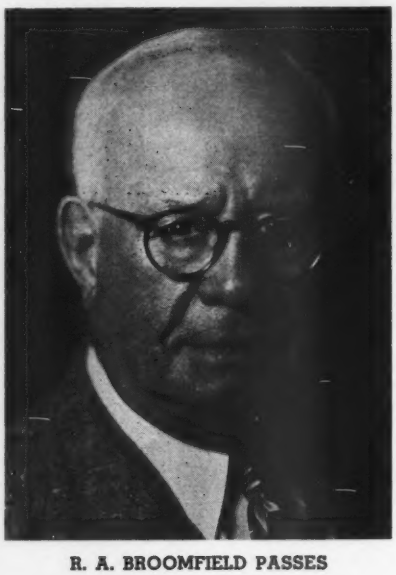
Robert Dyk has been appointed to fill the newly-created post of chief geophysicist of Tidewater Oil Company, according to a company announcement.

Robert Dyk

Dyk came to Tidewater from Geophysical Service, Inc., Denver, where he was manager of that concern's midcontinent division. From 1947 to 1951 he served as geophysical supervisor for General Petroleum Corporation at Bakersfield, California. Before that, he was associated with Western Geophysical Company in Los Angeles.

A native of Gloversville, New York, he was graduated in 1933 from the University of California at Berkeley, California, with a degree in geology.

Long prominent in professional organizations, he has served as president of the Denver Geophysical Society, the Rocky Mountain Well Shooting Association, and the Pacific Coast section of the Society of Exploration Geophysicists. He was general chairman of the latter organization's 1955 national convention in Denver.



R. A. BROOMFIELD PASSES

The recent death of R. A. Broomfield, at the age of 86, brings to a close another outstanding oil career. Broomie, as he was known to his intimates, was associated at the beginning of the century with J. L. Guffy; was in the Texas Spindletop when Guffy drilled the well known "Lucas Gusher" there; and, indeed, had quite an extensive experience in petroleum before he ever came to the west coast. He joined the T.N. Barnsdall interests in 1903 as assistant secretary-treasurer and office manager of Pittsburg Oil & Gas Company and just before he migrated to California in 1909 was also elected secretary of the Dominion Natural Gas Company. His particular function here was to manage and develop company holdings, and of this he did a right good job as many can testify. We remember, as chief gauger for Union Oil Company, taking the Barnsdall production at Rosecrans, and that was no mere smidgen we can assure you. In addition to that, under the Broomfield banner, Barnsdall had opened up the North Midway field; had split the honor with Rio Grande at Elwood; and later did a commendable bit of development work at Newhall-Potrero in 1937.

From 1909 until he retired in 1941, Broomie was a busy executive. Besides officiating as president of Barnsdall of California, he subsequently took over as vice president of the Barnsdall Corporation (now Sunray), and we always recall that he was intensely proud of his long and pleasant association with the late James A. Dunn. He also served as president of the old California Oil & Gas Association (WOGA) and the Oil Producers Agency, of which latter he was one of the founders. When at the peak of his vigor, Broomie was a brusque, strictly business sort of chap on the surface but underneath he had a heart as big as a watermelon. Ever since his retirement, for example, and until he could no longer carry on, he made a daily pilgrimage to the Petroleum Building with flowers and fruit from his Tarzana garden for the office staff.

In his spare moments he liked fishing, hunting, and an occasional foray into the speculative amusements, but his first love was flowers—not, we suspect, so much for themselves, as for their effect on his friends. He seemed to have what is known as "the green thumb" and there are a lot of people around town who are going to miss his kindly calls and the little posies that sort of became his visiting cards. Nobody really needs to feel sorry for Broomie—he had a long and fruitful career and the fates were kind to him. He was a Life Member of Petroleum Production Pioneers. There, too, he will be missed by literally thousands of his old friends and associates. Most of all, however, he will be missed by the members of his immediate family, and to them our heart goes out in sincere sympathy. RS.

The new president of Occidental Petroleum Corporation of Los Angeles is Armand Hammer, president of United Distillers Corporation of America and a director of the First Bank & Trust Company in Perth Amboy, New Jersey. Two additional members have been elected to the Occidental board: Charles Schwartz, a director of North Western Production Corporation of Houston, a division of El Paso Natural Gas Company; and Arthur Groman, attorney and member of Mitchell, Silberberg and Knupp, Los Angeles law firm.

John C. Manning has opened consulting geologic offices at 2512 Sprice street in Bakersfield. Holder of a bachelor's degree in geology from the University of Idaho in 1942, and a doctor's degree in geology from Stanford University in 1951, Manning, in addition to consulting work, is vice president and technical director of Ramney Method Western Corporation.

Claude Brown is president of the new Oregon Petroleum Corporation, with offices in the Elliott Building, San Mateo, California, and 1344 N.E. Sandy boulevard, Portland, Oregon. O. H. Maryatt is vice president, Robert Lewis, secretary, and a Dr. Osburne, treasurer. The company is credited with a lease on some 500,000 acres in the Clarano Basin in Oregon.

Richfield Oil's Rollin Eckis has been elected mayor of Bradbury, a new city. Jack Roth, a contractor, was named vice mayor.

H. John Eastman, president of the Eastman Oil Well Survey Company, on last July 8 captured for the fourth consecutive time the coveted first prize in the famed Calgary Stampede men's parade class for costume, horse and saddle. For several years, Mr. Eastman has been one of the most colorful of the Stampede's participants.

His costume was hand-embroidered with designs of cactus, horse shoes and other items synonymous with the west. The costume included a pair of genuine six-shooters complete with silver bullets and silver riding spurs.

Mr. Eastman rode his champion parade horse, Golden Surveyor. The palomino carried a custom-crafted, 114-pound sterling silver-mounted saddle, considered to be one of the 12 most beautiful saddles in the world.

In covering the event, the Calgary HERALD wrote: "Garbed in full western regalia, and mounted on Golden Surveyor, Mr. Eastman makes an unforgettable figure on Calgary streets."
Mr. Eastman is also an enthusiastic horse-breeder. He has a 43-acre ranch just outside Denver, Colorado.

Ed Pauley, Los Angeles oil man, is spending the month of August at his home on Cocoanut Island in the Hawiian Islands.

Charles Whitney of Bakersfield, Coastal Drilling Company, has been getting a first hand view of Richfield Oil's important strike on the Kenai Peninsula in Alaska. He flew to Anchorage a couple of weeks ago.

Elevation of R. K. Murdock to assistant petroleum engineer in General Petroleum's production department, with headquarters at Bakersfield, has been announced by C. C. Gandaubert, general superintendent. Murdock has been with General Petroleum for more than seven years.

E. D. Taylor Appoints New General Manager

E. D. Taylor of the E. D. Taylor Company, West Coast representative for Walker-Neer Cable Tool Drilling Equipment and Howard-Turner Rotary Drilling Equipment, announces the appointment of Raymond S. Ball as General Manager.

Ray, a graduate of Maryland University, Maryland, holds degrees of Bachelor of Science and Mechanical Engineering.

He has had a wealth of experience as a driller in California, Texas, and Florida.

Ed. Taylor, one of the real old-timers in the California oil patch, feels that by bringing Ray Ball into his organization, a continuation of the service rendered by his Company, will be assured.

Mr. and Mrs. Club Elects Officers

New officers of the "Mr. and Mrs. Club", a mixed group of oil men and suppliers, were elected at the annual meeting held recently in Los Angeles. Kenny Dale was elected President; J. C. "Bud" Russell, Vice President; Virginia Hensel, Secretary; Yummy Freeman, Treasurer; Ed Millaird, Al Beard, and Doug Lance, Executive Committee.

Nearly fifty couples comprise the membership of this popular organization, now in its ninth year. The next dinner meeting will be held at the Sequoyah Restaurant on October fourth.

The appointment of a manager of the special Offshore Operations Section at Ventura, Calif., has been announced by the Schlumberger Well Surveying Corporation. Two other managerial appointments and one in Sales Engineering also have been announced.

D. M. Murphy now heads the special Offshore Operations with headquarters in Ventura.

D. W. Stinger is appointed manager of the Borger, Texas location and J. D. Matlock, formerly manager at Borger, is now manager at Shawnee, Okla.

W. T. Wilson has been named Senior Sales Engineer for the Western Canada Division at Edmonton, Alberta.

With the export business of the oil and gas industry equipment manufacturers, supply and service companies on the increase, the May 14-23, 1959 International Petroleum Exposition is making plans for a large attendance from the oil nations of the world. Here we see General Manager William B. Way (right), and W. K. Warren, Chairman of the board of Warren Petroleum Corporation and exposition President, studying world wide attendance possibilities. At previous shows, there has been attendance from over fifty countries. The Nomads organization will serve as hosts to delegates attending from other countries.

Signal Gets New Scout

Jerry Long has joined Signal Oil and Gas Company as a geological scout, it was announced by J. Howard Marshall, vice president in charge of exploration.

Immediately prior to taking his position with Signal, Long was a geologist and engineer with Chanslor Western Oil and Development Company. Previously he had been associated with the Pacific Log Exchange, where his positions included that of general manager of the organization.

Long graduated from Occidental College with a B. A. in geology in 1954, and did graduate work in his field at the University of Washington.

Lonie L. Sims, veteran member of the oil fraternity and a Bakersfield resident for 48 years, died in Glendale following surgery. At the time of his passing he was with Trico Oil Company. Earlier, he was with Tidewater Associated Oil Company, now Tidewater Oil Company; and Barnsdall Oil Company.

Rocky Mountain NEWS

Colorado—Idaho—Montana—New Mexico—Utah—Wyoming—Western Canada

Wyoming

An active development program southwest of the South Medicine Bow field in Carbon County is expected to follow Pan American Petroleum's prolific discovery at the No. 1 UPRR-Anschutz Ranch, which had an initial potential of approximately 4000 barrels of oil per day from the Sundance. The wildcat, which is spotted in c ne nw 23-20n-80w, is in the center of a 5000-acre block held by Pan American. In a drill stem test at 6485-6519, the well flowed 43 gravity light green oil at the rate of 175 barrels per hour. In a previous test at 6451-85 feet, with tool open 70 minutes, the recovery was 6300 feet of oil. Operator was drilling ahead at last report.

First successful wildcat in the Wyoming portion of the Denver Julesburg Basin in the last two years is the No. 1 Floy in Laramie County, which swabbed 130 barrels of oil in 14 hours. The operator, Wyoming Western Oil, has installed pump. The wildcat, in c sw sw 4-15n-61w, produced from the J sand through perforations at 7625-31 feet. The Wyoming Western success has been a factor in stimulating further drilling activity across the state line in western Nebraska.

Gulf Oil Corp. is drilling below 3500 feet at the No. 1 Tresner-State in the Big Piney field of Sublette County where oil was discovered in the Mesaverde in an area that previously has been limited to gas production Operator ran three drill stem tests, recovering both oil and gas and, on the third test, a small quantity of distillate. In a test at 3245-3317 feet, the recovery was 1485 feet of oil and 300 feet of oil and gas cut mud, with tool open one hour. Gas recovery was at the rate of 106,000 cubic feet per day. In two succeeding operations, gas flowed at the rate of 3,000,000 cubic feet per day, with the first of these yielding 235 feet of oil and the second returning a gallon of distillate. The well is located in sw nw 36-29n-113w.

Belco Petroleum is preparing for a second test of the No. 1 Chimney Butte Unit, ne sw se 4-28n-113w, Sublette.

Belco Petroleum is preparing for a second test of the Chimney Butte Unit in Sublette County after successful completion of the discovery for 1,553,000 cubic feet of gas per day. The No. 1 Unit, ne sw se 4-28n-113w, produced through perforations in several intervals of the Frontier, which was topped at 6630 feet.

The Texas Co. recovered oil from the Mesaverde at the rate of 74 barrels per day at the No. 2 Table Rock Unit, c nw nw 31-19n-97w, Sweetwater County. Production also included 2500 cubic feet of gas per day. The pay sand was topped at 6475 feet.

Empire State Oil is approaching the Tensleep, expected at about 7000 feet, at the No. 1 Govt., nw nw 15-55n-96w, Big Horn County, where oil was recovered in two drill stem tests of the Phosphoria. First test, at 6781-6801 feet, recovered 240 feet of oil, and the second interval tested, 6801-26 feet, yielded 100 feet of oil and 290 feet of oil and gas cut water.

Colorado

South of the West Xenia field in Washington County, the Kimbark Co. has completed a J sand producer. The well is the No. 1 Wenig, c nw nw 23-2n-54w which produced at the rate of 23 barrels of oil per day, pump gauge, on completion, has been drilled to 4839 feet total depth. The J sand was topped at 4816 feet.

Lakota Petroleum, which is drilling a 6800-foot Lyons test in Larimer County, found oil and gas shows in a drill stem test at 5224-57 feet. Oil and gas cut mud was accompanied by free oil at the No. 1 Welty, c nw se 33-4n-69. Operator is coring ahead just below the test interval.

In Montezuma County, Pan American Petroleum found shows in cores at the No. 1 Ute Mountain, nw sw sw 24-32n-20w. At last report, operator was coring below 6775 feet.

Malco Refineries has completed its Weber sand discovery in the Buck Creek area of Moffat County for a flow of 221 barrels of oil per day. Production is through perforations at the intervals 10,070-80 and 10,074-84 feet and through 20/64 inch choke. Top of the Weber was logged at 10,072 feet, and the well was drilled to 10,200 feet total depth.

Tennessee Gas Transmission has staked location for a Morrison test in Routt County at the No. 1 Catron, c ne se 17-3n-87w. The location is in wildcat territory and five miles southeast of the Pagoda field.

Champlin Oil and Refining is drilling an intended confirmation of a D sand discovery drilled in Weld County by Petroleum, Inc. The Champlin well is the No. 1 Oxtobey, c nw ne 32-12n-57w. Operator is coring below 6670 feet.

Arizona

T. W. George's No. 1 Word, which was dry and abandoned at 2202 feet total depth, yielded fresh water in both the Chinle and Shina formations. Operator announced the following sample tops: Chinle 103, Shina 673, Moen 730, Virgin li 1777, and Toroweap 1970. The failure was drilled in c-nw sw 12-40n-6w, Mohave County.

Joe Irving has staked location for a 2100-foot Coconino test at hte No. 1 Govt., ne sw sw 1-27n-8e, Coconino County. Roger A. Fields has set surface casing at the No. Federal, also a Coconino test, in sw sw sw 17-38n-7w, Mohave County.

"Where'd you get that black eye?"

"I was out with Bill's old girl."

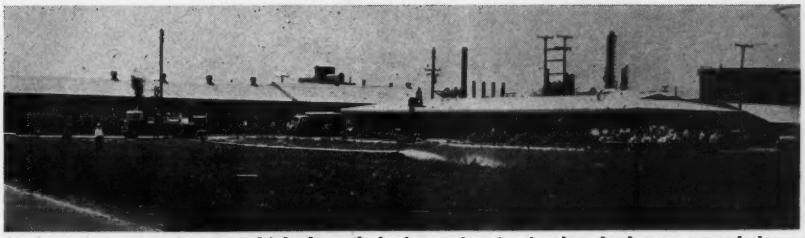
"Yeah, but how come the black eye?"

"Bill was a liar!"

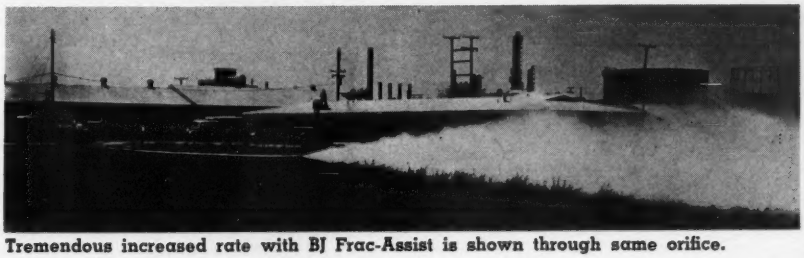
New Down-Hole Fracturing Tool Demonstrated By BJ Service

A new down-hole fracturing tool which generates up to 5000 hydraulic horsepower for high injection fracturing was demonstrated recently by BJ Service, Inc.

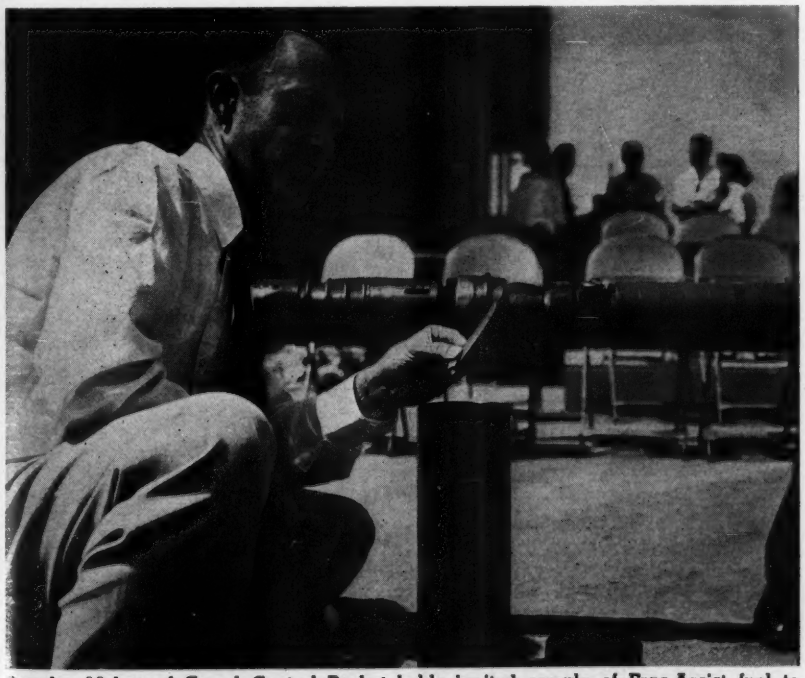
Called the Frac-Assist, it is a packaged power unit which is located in the tubing string through which the fracturing fluid is pumped. This new tool is located immediately above the perforated tubing opposite the zone or zones to be fractured. Normal fracturing procedures are followed at the start, with force supplied by surface pump trucks which pump fluid *through* the Frac-Assist tool. After this surface-pumped force has reached the zone to be fractured it is assisted or boosted by triggering the Frac-Assist tool. This is accomplished from the surface by introducing a triggering plug into the frac fluid stream. When this plug enters the Frac-Assist tool it compresses a firing cam and detonates blank cartridges which initiate a controlled burning of a gas-generating fuel. The high power gas exerts a tremendous, nearly instantaneous downward surge behind the fracturing fluid already in the tubing. This high injection, high pressure boost produces a super fracturing force to create multiple, productive features which are maintained and extended by the normal uninterrupted pumping flow which continues behind the Frac-Assist striking force.



Surface demonstration, in which down-hole fracturing is simulated, shows normal down tube pumping rate through small orifice.



Tremendous increased rate with BJ Frac-Assist is shown through same orifice.



Douglas Melcer of Grand Central Rocket holds ignited sample of Frac-Assist fuel to demonstrate the safety of the powerful yet slow-burning propellant.

The tool was demonstrated at the Research and Development section of BJ Service in Long Beach, California. The mechanical operation of the tool was shown first. Then a special surface firing was conducted. Down-hole conditions were closely simulated in this horizontal casing string. In the demonstration, a high-pressure pumping unit initiated the pumping stream of water at approximately 6 to 6½ barrels per minute. A stream of approximately 25 feet was ejected from the nozzle end of the string. The triggering plug was then released into the string. With an almost unnoticeable "thunk" the Frac-Assist tool fired and a tremendous jet stream of water and vaporized spray hissed through the air 125 feet—more than 4 times the length of the original truck-pumped force.

Prior to this unique surface demonstration of the down-hole tool, M. B. Riordan, vice-president in charge of

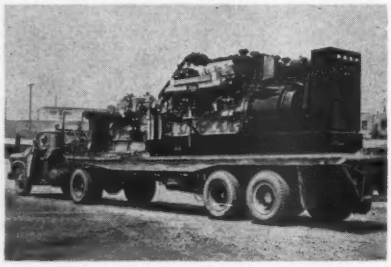
engineering and manufacturing for BJ Service, explained the development of Frac-Assist. According to Riordan, the primary purpose was to eliminate the friction and fluid losses inherent in pumping fluid from the surface to fracturing points thousands of feet below the surface. Special emphasis was put on designing a down-hole tool which could generate its own high injection rate without creating an explosive force in the well. The answer was achieved in this plug-triggered device utilizing a new solid propellant fuel. This new fuel is a variation of the solid rocket propellant devised by Grand Central Rocket Corporation for powering the third stage rocket which is scheduled to carry the Satellite to its line of orbit. The fuel, resembling an asbestos wrapping which surrounds the gas-generating chamber of the Frac-Assist, was also demonstrated at the field showing. In these tests it was shown that the fuel could not be ignited by normal shock, friction or heat. A fuel sample was struck with a hammer, rubbed with sandpaper and exposed to open flame. Finally an igniter strip was used to "fire" the fuel and produce a controlled, even burning.

In the surface test, one-fourth of the normal charge was used. It was estimated by R. S. Meiklejohn, who directed the horizontal demonstration, that this charge produced approximately 1280 hydraulic horsepower. He pointed out that despite a combination of unfavorable factors — including horizontal position and atmospheric pressure — an extremely significant boost from 6 or 6½ to 26 barrels per minute was demonstrated.

According to Riordan and Meiklejohn, the tool has now been thoroughly tested in the field to prove its mechanical operation and hydraulic performance. As described in well case histories provided, these tests have subjected the Frac-Assist to a wide range of well conditions and problems. To date, however, these tool runs have been in "incurable" wells where fracturing pressure improvement could be measured but where no production improvement could be gained. "Now that the tremendous high injection power—and complete safety—of this tool have been documented we feel that we are now ready to make Frac-Assist a great new force in fracturing," stated John B. Merritt, vice president and general manager of BJ Service, Inc.

Giant Waukesha Enginators To Oklahoma Refinery

A storm-wrecked Oklahoma refinery, being rebuilt since it was struck by a tornado on April 2, is expected to go "on stream" again shortly. One of its new features will be three big Waukesha V-12 Enginators for intermittent service to supply electrical energy in connection with certain refining processes, and as a reliable source of electricity in the event of power line failure. The refinery is the Madill, Oklahoma plant of the Warren Petroleum Corporation of Tulsa, in the Cumberland oil field of Marshall County. It had been processing ten million cubic feet of wet natural gas daily and manufacturing from it forty-five thousand gallons of gasoline, propane, and butane.



One of three big Waukesha V-12 Gas fuel 300 KW Enginators enroute to Madill, Oklahoma plant of the Warren Petroleum Corporation.

The big Waukesha Enginators are individually skid-mounted engine-generator sets, each with its own unit-mounted control cabinet. They are 300 KW, 3-phase, 60-cycle, 480-volt machines, and may be operated in a parallel arrangement to supply 900 KW. The Waukesha 12-cylinder natural gas engines are direct-connected through a flexible drive to rotating field single-bearing generators and governed for an operating speed of 900 rpm in this application. They are equipped with air starting motors.

Waukesha Enginators are a development of a half-century of manufacturing experience in the field of heavy-duty engines and electrical equipment. The complete line ranges from an 85 KW capacity Enginator up to the turbosupercharged V-12 Series which develop up to 800 KW at 1200 rpm for standby service and have a continuous duty rating of 675 KW.

Nothing indicates approval of a magazine like a renewal subscription check.

Brochure Describes New Water Flood Product By Tretolite

FLUDEX, a new water flood and water disposal stimulator is fully described in an illustrated brochure recently issued by its manufacturer, the Tretolite Company of St. Louis.

Since one of the problems in water flood operations is the incompatability of certain treating agents often needed to correct simultaneous problems, this literature gives full recognition to the need for a multipurpose injectivity stimulator—and also gives a detailed description of just what FLUDEX is and how it works.

In addition to being an excellent wetting agent which will condition the surfaces of the formation and permit faster and easier injection of water at lower operating pressures, FLUDEX is also identified as an effective bacteriostatic agent for the control of sulfate-reducing organisms, as a corrosion inhibitor, and as a scale preventive.

Space is also devoted to the specific "how" of application in such areas as pumping wells with open casing, water disposal and water flood systems, and backwashing formations.

How much FLUDEX is required is still another topic that receives careful attention in the present literature.

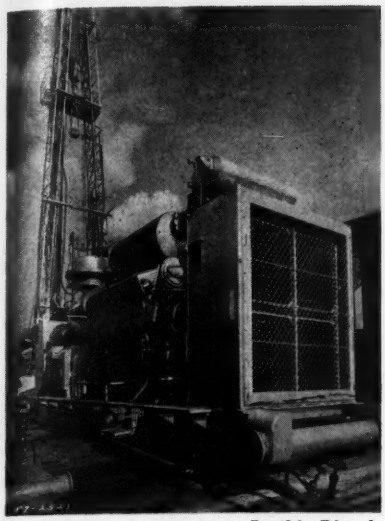
The effectiveness of FLUDEX is substantiated by a number of actual case histories which reveal important "before" and "after" statistics of operation in water floods and injection wells where FLUDEX has been used.

For a copy of the FLUDEX brochure, the reader is invited to write to the Tretrolite Company, 369 Marshall Ave., St. Louis 19, Missouri.

New Unit By General Motors

A new and more powerful direct current, Diesel-electric generating unit for oilwell drilling—completely self-sufficient with its own built-in alternating current generating system for auxiliary purposes—is announced by Electro-Motive Division of General Motors at La Grange, Ill.

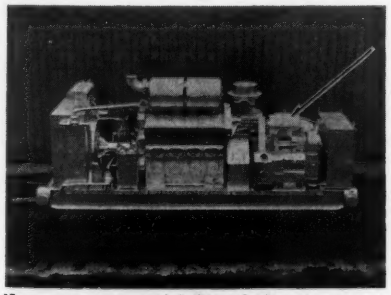
Electro-Motive, which made oil field history when it introduced a completely integrated, compact Diesel-electric power system for drilling rigs in June, 1955, now offers the first standardized, completely self-sufficient unit which is independent of any other source of electric power. Its own a.c.



A new lighter weight, more flexible Diesel-electric generating unit, built by Electro-Motive Division of General Motors, is shown undergoing field testing on Sun Oil Company's Rig 15 near Rayne, Louisiana. Unit, scheduled to go into commercial production August 1st, features increased ratings of generators—from 500 to 640 kw—and more powerful motors, rated up to 800 horsepower as compared with 625 for the present model. The General Motors model 8-567CR Diesel engine has been increased to 1,000 horsepower continuous. The new unit also features its own a.c. generator to provide power for a.c.-driven blowers, exciters and controls, making the entire power system completely self-sufficient.

generator provides alternating current to the rig a.c. generating set.

"Since April, the prototype unit has undergone rugged field testing through the cooperation of the Sun Oil Company," said Nelson C. Dezendorf, vice president of General Motors and general manager of Electro-Motive Division. "The unit has been in service on Sun's Rig 15 near Rayne, Louisiana, where it has helped drill a 15,000-foot well."



New, more powerful Diesel-electric generating unit for oilwell drilling is shown leaving plant of Electro-Motive Division of General Motors at La Grange, Ill., prior to field testing on Sun Oil Company Rig 15 near Rayne, Louisiana. Arrow points to alternating current generator, built in as integral part of unit to provide a.c. power for all auxiliaries making unit completely self-sufficient. Unit is scheduled to go into commercial production soon.

The new unit, designated SR-10, is 2,000 pounds lighter in the air-cooled model. It is a more powerful unit than its predecessor with generator ratings up from 500 to 640 kw and motor horsepower increased from 625 to 800. Horsepower of the General Motors model 8-567CR engine has been increased to 1,000 continuous in the new unit.

A load regulator automatically provides the load demand of the driller without overloading the engines. Thus, the engines can be loaded to their full ratings giving the contractor more useable power for his horsepower dollar.

"A number of other features have been designed into the equipment as a result of the experience gained from 21 Electro-Motive-powered drilling rigs currently operating in the Texas-Louisiana Gulf Coast area," Mr. Dezendorf pointed out. "These features include an advance design and simplified generator drive arrangement, elimination of rotary exciters with their attendant maintenance, newly designed engine accessory arrangement, heavier duty electrical control equipment, and re-designed control cabinets. The new model D-49 motor includes many engineering advancements such as improved insulation and incorporation of splash guards with horsepower rating increased from 625 to 800."

Signal Hill Wood Derrick Demolished

One of the few remaining wooden derricks in the Long Beach portion of the Signal Hill field has been demolished.

Known for 28 years as Miller No. 1, the 130-foot derrick stood at the crest of "Whisker Hill." The well beneath produced more than a quarter-million barrels of oil since it was first completed. Production today is about 10 barrels every 24 hours.

Bill Thomas, who at present is a rig building contractor, helped put up the old derrick. Don Simmons was superintendent of the company when the well came in during the early days of Signal Hill.

Summerland Offshore Drilling Discussed

Standard Oil Company of California and Humble Oil & Refining Company may decide in the near future to construct a platform for the drilling of one or more test wells on their joint lease offshore Summerland in Santa Barbara County. The lease was acquired last January by the two companies and since that time two core holes have been put down and much geologic information naturally obtained. The holes were drilled to 8454 and 7389 feet, respectively from a mobile barge, "Pacific Driller." The holes both were touched down to the Sespe formation.

Long Beach City College Will Again Offer Course in Oil Field Technology

One of the many courses offered by City College covering specific fields is the two-year day preparatory course in "Oil Field Technology." A new class will be enrolled in this course with the opening of school on September 16, 1957.

The course is open to anyone who is a high school graduate or who has a good background of work experience. High school graduates who successfully complete the program will be eligible for junior college graduation and the Associate in Arts Degree.

The college has worked closely with the Educational Committee of the California Chapter of the American Association of Oilwell Drilling Contractors and the Los Angeles Basin Chapter of the American Petroleum Institute in the development and operation of the program. The petroleum industry has cooperated in assisting the students by offering many of them employment during summer vacations as well as permanent employment at the completion of the course.

All phases of oil well drilling and oil production are covered in laboratory work which is supplemented by frequent field trips.

Anyone who is interested in enrolling in the above course or who would like further information regarding this program should apply at the Guidance Office, Room 117, at 1305 East Pacific Coast Highway, or call HEmlock 7-6481.

BA Moves Headquarters

British-American Oil Producing Company has moved its western district production and engineering office from 530 west Sixth street, Los Angeles, to 3367 Telegraph road, Ventura. The new telephone number is Miller 8-6811.

THIS LAUGH

OFF!!

The customs officer stopped a factory representative who was entering the United States from Canada. "Have you anything to declare?" he asked.

"Nothing but a bottle of holy water."

"What kind of water?"

"Holy water."

The officer checked the bottle and stated it was whiskey.

The factory represenative threw up his hands, "Glory be—a miracle."

Northern girl—"Men are all alike."

Southern girl—"Men are all ah like, too."

"And now, gentlemen," continued the congressman, "I wish to tax your memory."

"Good heavens," muttered a colleague, "why haven't we thought of that before?"

Here's the line
Modern wolves try:
"Come on up and
Hear my Hi-Fi."

The American history class was discussing "laissez faire." To make the topic as simple as possible, the teacher explained it was French which could be roughly translated to mean "hands off." One of the girls shot up her hand and asked, "How did you pronounce that?"

"Laissez faire," the teacher repeated.

"Good!" she exclaimed. "I can use that on my date tonight!"

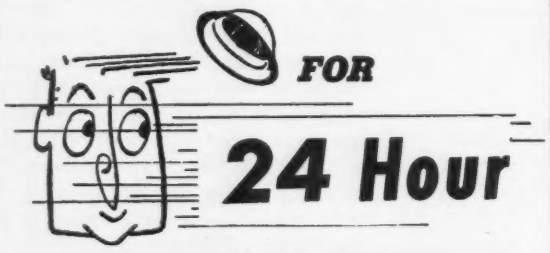
A mother brought her teen-age daughter to the doctor's office and explained that the girl, who sat shyly staring at the doctor, coughed all night every night.

The doctor told the youngster to expose her chest so that they could make an exmination. When the girl was ready, the doctor put the stethoscope on her chest, and said with a smile, "Big Breaths."

Instantly her shyness thawed. "Yeth," she said proudly, "and I'm only thixteen!"

Husky Truck Driver: "Ah, tell me pretty maiden, where did you get that little round rosebud of a mouth?"

Petite Diner Waitress: "From saying 'no' to foxy old wolves like you!"



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